

THE FIRST 30 DAYS

**A Practical Guide to Managing Natural Disasters
for Microfinance Institutions**

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PREFACE

This guide was developed to provide leaders of microfinance institutions (MFIs) an approach and tool to manage a period of crisis following a natural disaster. It does not pretend to cover all disaster situations. It was born out of a particular experience, and while other situations may share some of the similarities and benefit from some of the observations and conclusions, no attempt has been made to exhaustively explore all possible situations and develop a manual that attempts to cover all of them.

The type of disaster – two major earthquakes – that struck El Salvador in January and February 2001, can best be described as a short-duration, semi-widespread, sudden-onset disaster. By "short-duration" we mean that the incident itself was confined to a very short time period, after which the country and economy were able to rebuild in relative calm. By "semi-widespread" we mean that, although a large area of the country incurred some damage from the earthquakes and a lot of people were affected, (a) only 5 of the country's departments suffered extensive damage, and (b) even within those areas, the amount of damage sustained varied considerably. None of the MFIs discussed faced a situation in which all of their branches or all of their clients were affected, and several MFIS suffered no damages at all, either to their own facilities or to their clients. And, by "sudden-onset" we mean that, while the threat of earthquakes is always present in Central America, a major earthquake occurs suddenly, with little or no warning. It is not possible to predict in advance when they will occur, what areas they will damage, and how severe the damage will be. Small, inconsequential earthquakes occur regularly throughout the region, with large earthquakes occurring less frequently, in very different locations, at random intervals.

Because of the nature of these disasters, the type of disaster planning and preparation described in other literature is not practical. Since crises occur infrequently, and since the crises that do occur differ – a hurricane this year, a flood in a different part of the country several years later, and an earthquake in a different part of the country several years after that – plans are quickly forgotten and outdated. As long as an institution is minimally prepared, however, it can survive a crisis of the type described if it manages the crisis properly. The intent of this guide is to help you, the manager or chief executive of an MFI, understand and implement a process of crisis management in the face of a major disaster.

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INTRODUCTION

Purpose of this Manual

The survival of a microfinance institution (MFI) facing the debilitating effects of a natural disaster depends largely on the actions it takes in the days immediately following the incident. Yet, it is precisely in this chaotic early post-disaster period that MFIs will find it most difficult to make informed decisions and take effective actions, even with pre-developed disaster plans.

The purpose of this manual is to provide a clear set of steps that you, as the manager on an MFI, can follow in the period immediately after a disaster to manage the crisis. It is based on the experience of 4 MFIs in El Salvador that faced the devastating effects of two major earthquakes in a very short period of time.

The first step in managing a disaster is understanding it. The first thing you should do when faced with a natural disaster is to take a few moments to read this background section to be able to place the crisis you are facing in a manageable context.

Background

Prior to January 13, 2001, El Salvador had a sound microfinance system that was, with USAID/El Salvador assistance, rapidly expanding into rural areas of the country. USAID/El Salvador had initiated the FOMIR/DAI project in late 1998 to provide technical assistance to selected MFIs to expand financial services in rural, underserved areas. The specific objective was to build a sustainable rural microfinance industry that would expand and deepen financial services for the rural poor. Through technical assistance, training, and limited financial support, the eleven microfinance institutions (MFIs) participating in the FOMIR/DAI program had an expanding client base, a growing portfolio of loans in rural areas, and a relatively low rate of delinquency.

The earthquake that struck El Salvador on January 13, 2001, caused widespread damage throughout the southern part of the country. Some 800 people died, another 4,500 were injured, and nearly 200,000 homes were damaged or destroyed. The initial damage to the MFIs participating in the USAID/El Salvador-sponsored FOMIR/DAI project, while considerable, appeared to be manageable. Only two of the institutions had a significant number of clients that were severely affected by the earthquake; the other nine could reasonably be expected to absorb the increased risk to their portfolios with their existing resources.

However, a second major earthquake struck the country on February 13, killing another than 315 people and extending the damage to homes, public services and productive assets. A third substantial earthquake occurred on February 17 and three additional moderate earthquakes on February 23. This rapid succession of earthquakes in the February 13 to 23 period exacerbated the problems facing the MFIs participating in the FOMIR/DAI project. A substantial percentage of MFI clients were severely impacted by the earthquakes, and some of the institutions began to experience higher rates of delinquency, lower rates of repayment, and lower income. What originally appeared to be a manageable

situation became much more tenuous, requiring a concerted effort to help the institutions cope with the crisis.

Understanding the Nature of Disasters

The impact of a disaster is largely determined by three factors: the type of disaster that occurs, its scope, and its duration.

Types of Disasters

MFIs typically face three types of disasters: ***Common Disasters*** (risks that every financial institution faces), ***Sudden Onset Disasters*** (risks that occur infrequently and suddenly, and which cannot be easily predicted) and ***Chronic or Long-Term Disasters*** (risks that are inherent to a specific country or location, and that can be predicted or are continuous).

Common Disasters

Every financial institution faces a set of institutional risks that, while not normally classified as "natural disasters," can certainly be as devastating and debilitating. Among these are the threats of:

- Theft and Robbery
- Fraud
- Fire
- Malicious damage
- Death or disability of a Key Individual

The common characteristics of these types of threats are that: (a) every MFI faces them every single day, and (b) they threaten the institution, not its clients. Damage from the common disasters will impact an institution's ability to perform, or its financial stability, but they will not, normally, affect the quality of its portfolio.

Sudden Disasters

In addition to the common, everyday risks, some institutions – due to geographic location or other local situations – may face risks that occur infrequently, cannot be easily predicted, can strike without warning, and that can cause major damages and disruptions. Among these are:

- Earthquakes
- Volcanic Eruptions
- Severe Rains and Flash Floods
- Hurricanes
- Brush Fires
- Civil Unrest and Terrorism

In each of these cases, years may pass between occurrences of an event, the event may occur with little or no warning, damage may occur to either the institution or its clients, and the extent of damage is difficult to predict or plan for. Furthermore, the disaster may not affect everyone; an earthquake, for example, may damage only one region of a country, leaving the rest of the country untouched.

Sudden disasters produce many of the same effects as common disasters – loss of premises, loss of systems, loss of data and loss of life. However, sudden disasters of the types considered in the disaster literature also have wider impacts. The amount of damage tends to be greater, and loss of life may extend to other staff (including loan officers who have direct contact with clients). Most important, damages from sudden disasters will inevitably extend to the MFI's clients and may well affect the quality of the institution's portfolio.

Chronic Disasters

Finally, some institutions are located in areas that are subject to regular, predictable or long-term events that require special, permanent measures to protect the institution and its clients. Sudden events that occur regularly can also fall into this category. Some examples of these chronic disasters include:

- Annual Floods
- Droughts
- War or Civil Instability

In these cases, the predictability or regularity of the event makes it possible and imperative to develop permanent contingency plans and establish permanent risk-mitigation measures. Chronic disasters – such as flooding in Bangladesh – have attracted the most attention in the literature on disasters and microfinance.

Scope

Disasters can be widespread, or localized. *Widespread* disasters affect large numbers of people over large areas. Annual floods in Bangladesh disrupt all residents and economic activity in the river flood plain. Hurricane Mitch caused major damage throughout Honduras. *Local* disasters tend to affect a relatively few people concentrated in a single area. The fire in the municipal market of Santa Ana, El Salvador, severely affected the livelihoods of the market vendors, but did little damage to other parts of the town or other residents.

Having said this, a local disaster can have the characteristics of a widespread disaster in the case of an MFI that has only one branch and a very concentrated client base. A local disaster may well destroy all of the MFI's physical assets and severely impact all of its clients.

Equally important, widespread disasters inevitably have concentrated local impacts. The earthquakes that struck El Salvador would probably be classified as "widespread", yet the degree of damage differed considerably from village to village, and even from house to house within a village.

Duration

Disasters also vary by duration. The earthquakes in El Salvador were inherently short-term events. Once the damage was done, a period of recovery set in. But many chronic disasters – such as HIV-AIDS or civil unrest or wars – may cause a period of instability for months, years, and even decades.

Implications

Managing a crisis successfully depends on understanding its nature and adopting appropriate strategies. Long-duration, chronic disasters require advance planning and preparedness. It is very difficult to plan and prepare for a sudden-onset disaster; you must respond to the peculiar characteristics of each disaster. Disasters that affect large numbers of your clients are more critical than disasters that impact only a fraction of your client base. Recognizing the type of disaster you are facing, therefore, is the first step for managing it successfully.

Understanding the Consequences of a Natural Disaster

A disaster may have an impact on your MFI, your clients, or both. Disasters that harm your MFI directly – such as fires, theft, robberies and the like – usually will not endanger the quality of your portfolio or your ability to do business, although multiple unmanaged crises may reduce public confidence in your MFI. Disasters that harm clients, on the other hand, will have a direct impact on portfolio quality and your ability to do business. This guide is primarily intended for handling disasters that affect your clients and, therefore, the quality of your portfolio.

Who is Affected	Type of Disaster		
	Common	Sudden	Chronic
Institution	x	x	x
Clients		x	x

Impact on Clients

The need for disaster management originates primarily from the impact of the disaster on your clients. Apart from direct physical damage to your facilities and staff, the primary threat to your institution results from the losses suffered by your clients and how that affects their ability to continue to do business with you. You cannot protect your business without stabilizing or improving the condition and prospects of those clients.

Individual clients can be affected in several ways by a natural disaster.

- *Loss of life or health*, which either eliminates or reduces the client's ability to make loan payments, and which can create a need for cash to meet increased personal expenditures for health;
- *Loss of personal assets* (house, furnishings and possessions), which creates a need to allocate savings and income to replacing shelter and other lost assets and reduces the client's ability to meet other obligations, including debt service;
- *Loss of business assets* (locale, equipment and inventory), which reduces or eliminates the client's ability to earn income and creates a need to reallocate

savings and income to replacing the lost assets, both of which reduce the client's ability to meet other obligations, including debt service ; and

- *Loss of business or market opportunities*, through their own clients' loss of life, health, assets and income, which reduce present and future income.

Microentrepreneurs are particularly vulnerable to loss of income and disruption of their ability to conduct their business in a widespread natural disaster. Because they often have their place of business in the home, a loss of personal assets also signifies a loss of business assets. Because they are self-employed they lack access to a continued stream of income through salaries or wages.

The practical consequences of this situation for your MFI is that your clients will experience:

- Reduced income and ability to maintain expense levels;
- Reduced potential future income;
- A need to restructure expenditures to focus immediately on survival spending – food shelter and clothing; and
- a need to make major expenditures to replace assets or rebuild businesses

Each of these will impact the clients' ability and willingness to save and to meet his/her loan payment obligations.

Impacts on your MFI

Apart from direct physical damage to your facilities and staff, the primary threat to your institution from a disaster is the threat to the quality of your portfolio. MFIs are normally protected from many credit risks because of the diversity of their portfolio. Widespread disasters, however – such as hurricanes, floods and earthquakes – can overwhelm the natural risk-minimizing diversity of the microfinance portfolio and threaten your solvency and sustainability.

This financial threat to your MFI derives primarily from the problems faced by your clients. With a reduced asset base and income stream, your clients will need to focus resources first on basic survival – food, clothing, shelter, and health care. Funds to repay loans may be temporarily or permanently lost, with the result that your MFI's income can be reduced to a point where you can no longer meet your current expenditure needs. Assets pledged to secure loans may be worthless. With defaults on loans and lack of collateral, your portfolio and your business may collapse. Your clients may need to withdraw their savings (if you are a deposit-taking institution), creating liquidity problems and possible insolvency. Your clients may also have a need for additional external resources (loans and grants) to rebuild their assets and productive capacity, resulting in a demand for resources that your MFI cannot supply. This loss of funds and need to rebuild assets necessitates reprioritizing expenditures, and has immediate implications for microfinance institutions such as yours. As Geetha Nagarajan points out:¹

- some percentage of clients will fail to make loan repayments;

¹Cited in “Liquidity Problems after a Natural Disaster,” MBP Rapid-Onset Natural Disaster Brief #3, Preliminary Draft, 1/27/99, p. 1.

- some percentage of clients will cease to make deposits in compulsory or voluntary savings programs;
- some percentage of clients will request advances against their savings; and
- some percentage of clients will demand emergency and reconstruction loans, in addition to their existing loans.

The more clients that experience such losses, and the greater the extent of the damage suffered, the greater the risk to your MFI.

The reduction in financial assets and income can threaten the solvency and survival of your institution in many ways. In extreme cases:

- A high rate of default on loans can deplete reserves and cause insolvency for regulated, deposit-taking institutions and a contraction in both portfolio and income for non-deposit taking, non-regulated NGOs;
- A high rate of withdrawal of savings from a deposit-taking financial intermediary can deplete liquidity and reserves, creating a crisis of confidence in the institution and leading to its collapse;
- A reduction in collections and income can disrupt cash flow and impair the ability of the MFI to meet regularly scheduled expenses;
- A high rate of demand for funding that the MFI lacks the resources to satisfy can cause clients to abandon the institution and take their business elsewhere.

Even “manageable” levels of reduced financial activity can have severe impacts on an MFI:

- Higher rates of delinquency or loans that are restructured to permit extended or slower repayment rates reduce income and can jeopardize your institution’s ability to meet current expenditure requirements;
- Higher rates of delinquency or restructuring loans to permit extended or slower repayment rates slow growth in the portfolio and reduce the ability of your institution to meet new demands for financing or plans to open new branches or village banks.

Risks are not limited to financial and credit risks. Severe damage to facilities and equipment from floods, storms or earthquakes can disrupt operations. Staff may be incapacitated, compromising your ability to service your portfolio. Records – including computerized databases – may be lost, making it difficult or impossible to track clients or loan balances. Security and fraud risks often increase as infrastructure and systems are disrupted. There may be increased competition from other money lenders and financial intermediaries. There may be distortions in local financial markets – because of donated relief assistance, government-led debt forgiveness programs, and an increase in no-cost grants and subsidized loan programs – that undermine your business.

Disasters Also Create Opportunities

At the same time, however, disasters can create opportunities for both microentrepreneurs and MFIs. Many microenterprises are engaged in small scale construction activities and manufacturing that lends itself to reconstruction efforts. A disaster creates a sudden increase in the demand for their goods and services. Surviving microenterprises engaged in food service or petty commerce suddenly find an increase in demand for their products as traditional distribution channels and food preparation facilities are destroyed. Small commercial vendors are well positioned to change their product line to meet the demand for goods such as water, plastic and other items needed to cope with the disaster. The earthquakes in El Salvador demonstrated the resiliency and adaptability of the microenterprise sector; as microentrepreneurs were back in business the day following the earthquakes selling entirely new lines of products suited to client needs, including water, gloves, masks and quick food items.

Disasters also create a demand for different loan products. Most MFIs focus on short-term working capital loans. But with a disaster, their clients suddenly need larger and longer-term loans to rebuild houses, replace productive assets, and reestablish their businesses. As in the case of individual clients, disasters create opportunities for financial institutions that are in a position to capitalize on them. Opportunities come from ability to attract new clients, generate new business, and offer new products.

WEEK ONE: GETTING PREPARED

The first week following any major disaster is a crucial period for getting organized to manage the situation. In many cases – such as the earthquakes in El Salvador – the disaster is unexpected and unprepared for. Few institutions have well-rehearsed disaster response programs that can immediately be executed. When the disaster is predicted – a flood that is approaching, a hurricane that has been tracked for days – some of the steps listed here may have already been taken.² But each new disaster always produces chaos and requires a new, specific response.

Throughout this process you must remember one thing: whenever and wherever possible, continue to operate your MFI as normal – keeping branches open wherever feasible, maintaining the same hours of service, and providing the same customer contact and services. Even in the face of a major disaster, many parts of your organization can probably continue to function normally.

Remember Your Key Objectives

The key objectives of any microfinance institution facing a natural disaster must be to:

- secure the safety and soundness of the institution, both in terms of physical safety and soundness and the safety and soundness of its portfolio;
- maintain the loyalty of good clients; and
- generate new business.

Failing to respond properly will jeopardize your ability to accomplish these three objectives.

The Essential Steps

During the first week following a sudden onset disaster, your MFI should undertake ten critical actions:

1. Verify the Scope of the Disaster
2. Conduct an Initial Stocktaking of Your Key Assets
3. Establish a "Crisis Task Force" and a "Crisis Room"
4. Ensure the Safety of Key Resources
5. Determine Immediate Actions that are Needed
6. Review and Refine Key Disaster Policies
7. Inform Employees about Policies and Procedures
8. Prepare a Monitoring System
9. Develop and Implement a Communications Plan
10. Initiate a Client Survey to Assess Risk

²A separate article on risk management discusses the basic steps an MFI needs to take to provide core protection against major risks. Also, several lengthy reports and guides on disaster preparedness exist in the literature.

Although these are listed as separate activities, they will not necessarily occur in order. Many will be initiated virtually at the same time, and one need not be completed before the next begins.

Parallel to this process of crisis management, you should continue to conduct business as usual in branches (or through loan officers) that were unaffected or that suffered only minor disruptions and damage from the disaster.

1. Verify the Scope of the Disaster

One of the first things you will need to do is find out how widespread and severe the disaster was. Using information from radio reports, telephone calls to officials and colleagues, and any other source available you need to determine the characteristics and intensity of the damage, specifically: geographic location, nature and amount of damage that was suffered, condition of roads, communications and utilities. Armed with this information, which will evolve over time, you will be in a good position to know whether you are dealing with a major or minor crisis, and if any of your branches or clients are likely to have suffered damage.

You will also have an initial idea of how to react to the situation. Intense widespread disasters will require an all-out effort on the part of you and your employees to manage the crisis. Minor or local disasters may require a lesser response.

2. Initial Stocktaking

Your key assets are your personnel, physical facilities, processes and security. Protecting these is the first step you need to take in the face of a disaster. Although your primary concern should be with your employees, the immediate risk to your MFI is security, and must be dealt with immediately

Assuming that you have not suffered death or injuries that need immediate attention, you should launch an immediate stocktaking of these key assets.

Security

Security is a major threat in a disaster situation, as looting, fraud, vandalism and robbery often accompany disasters. *Your MFI needs to assess the integrity of its security systems and determine how to establish at least minimal security to protect its assets.* You need to visit your office, and make sure that you or other employees visit other branches as soon after the disaster as you can. Do not enter any buildings that appear to be damaged, but you do need to take appropriate actions to make sure that your facilities are safe from illegal entry, which may include contracting a security service or posting guards to protect the premises.

Employees

Your MFI's **personnel**, including yourself, may have been affected by the disaster, or have family members or other relatives who were affected. If so, it is important for you to understand how they have been affected and what they need to be able

Key Actions: Day 1

1. Verify magnitude of the disaster.
2. Assess damage to your personnel and operations.
3. Appoint crisis manager and crisis team.

to cope with the situation. *Your MFI must identify the extent to which employees have suffered damages, and determine how best to help your employees manage personal needs.* You need to have each of your branches notify you immediately of any deaths or major injuries so that you can gain an understanding of the magnitude of the problem you are dealing with. A simple table like the one shown below will help you quickly summarize the situation:

Branch	Total Employees	Number of deaths	Number of Serious Injuries
Totals			

In addition to this quick summary, you should also have each branch collect and transmit to you information about affected employees and their needs. This may actually take several days to compile. A sample form for reporting this type of information is included in Annex A.

Employees who have been affected will need to attend to their own personal situations, and you must be sensitive to these needs and permit your employees the time to deal with them. You need to remember that maintaining physical and emotional health during a crisis will require time, effort and patience. You also need to recognize that you and your staff will be experiencing increased levels of stress while you react to the disaster, and be prepared to concede the time needed deal with the stress and added commitments.

Physical Facilities

Your **physical facilities** may have been damaged in the disaster. You may need temporary quarters. You may need to move or rebuild. You may need to make major repairs or purchase new equipment. *Your MFI should undertake an immediate inventory of its physical facilities to determine the extent of damage and the steps needed to restore functionality.* The illustrative form below can help organize this information to better understand your needs and determine priorities:

Infrastructure	Extent of Damage			Needed Action
	Small	Medium	Severe	
Headquarters				
Physical structure (walls, roofs, etc.)				
Public services (water, electricity)				
Vehicles				
Communications (phone, fax)				
Computer Systems				
Other				
Branch No. 1 (repeat for other branches)				
Physical structure (walls, roofs, etc.)				
Public services (water, electricity)				
Vehicles				
Communications (phone, fax)				
Computer Systems				
Other				

Operations

Your **operating processes** may have been interrupted by the disaster. Time lost to personal recovery may impair your MFI's operations. If loan officers have perished or are impaired in a disaster your MFI may have lost its ability to contact and service clients, which will increase the risk of defaults. The death or incapacitation of a key computer systems administrator can prevent your MFI from producing the reports and information you need to service clients and monitor performance. *Your MFI must assess the impact that staff losses are likely to have on your operations and determine steps to overcome these problems.* The following table illustrates one method for estimating the impact of employees loss or incapacitation from a disaster. The column entitled "Needed Action" is especially important, as this is where you record the steps you need to take to compensate for the inability of an employee to perform their normal duties;

Estimating Impact of Employee Losses Administrative Personnel

Office: Headquarters (repeat for branches)

Employee	Degree of Injury	Department	Needed Action
Summary of Processes Affected:			

Loan officers are a special case, because you are also interested in knowing how many groups (in the case of group-oriented lending methodologies) and clients are affected. Since you will want to begin contacting clients at the earliest possible moment, you must immediately begin to plan how you will cover the clients of any loan officer who is incapacitated. You may need to reassign existing staff or have supervisors or managers fill in for injured staff in the short run. Replacing an officer is probably not feasible for the short run, as there is no time for training, but temporarily rehiring a former employee might provide a short-term solution.

Estimating Impact of Employee Losses Loan Officers

Office: Headquarters (repeat for branches)

Employee	Degree of Injury	Clients		Needed Action
		Groups	Individuals	
Comments:				

Similarly, damage to your physical facilities, your ability to communicate, your manual files, your ability to produce daily delinquency or other reports, your ability to travel or to hold meetings may impact your ability to serve clients, perform needed front- and back-office tasks, or to even conduct business.. *Your MFI needs to assess the extent to which it can perform its essential management and operations functions, and what steps or actions are needed to be able to perform these.*

Estimating Damage to Business Processes

Office: Headquarters (repeat for branches)

Process Affected	Description of Damage	Needed Action
Collections		
New Loan Processing		
Accounting		
Delinquency Management		
Legal and Enforcement		
Internal Audit		
Front Office Client Service		
Other		
Summary of Processes Affected:		

The various quick assessments in this stocktaking will give you a clearer picture of the extent of the crisis it is facing and the extent to which crisis management will be needed.

3. "Crisis Task Force" and "Crisis Room"

In any major crisis situation it is important to treat the crisis as a project, and to manage it as such. The worse the crisis, the more important it is to set up a mechanism for dealing with it.

If you are facing a major crisis you should name a *Crisis Manager* and a *Crisis Task Force*. The *crisis manager* should not be you, the chief executive of the MFI, because you will need to spend a great deal of time managing external relations with grant and credit sources, donor agencies, local officials, and many others. It is possible that the *crisis manager* may not even be another "senior" officer, because the role requires a person who is very good at organizing and managing a process and who can be freed from other responsibilities to dedicate significant time to managing your MFI's response to the crisis. For the duration of the crisis the *crisis manager* should report directly to you, the chief executive.

The *crisis task force* needs to be comprised of an authoritative representative from each of your divisions or departments – including credits, information systems, accounting, operations, etc. These individuals will be expected to meet daily during the initial period of the crisis, and as frequently as needed thereafter. The purpose of the task force is to ensure that all of your key operating departments understand the nature and dimensions of the crisis, and that your MFI forges a comprehensive and uniform response to it.

Unless the crisis is truly one of epic proportions, the task force will function as an *ad hoc* body, meeting when necessary to review the situation and plan strategies. During the first days of a crisis these meetings should take place every morning. As the situation becomes clearer and more manageable, the frequency of meetings may decrease. The members of the task force will continue to exercise their regular responsibilities during the crisis.

In addition to naming personnel to manage the crisis, you should establish a dedicated location for the committee to meet and assemble information. Because information management will be critical to your success in responding to the crisis, this dedicated room should be equipped with a computer hooked up to the network, clip charts or white boards, panels for displaying charts and graphs, and storage facilities.

4. Ensuring the Safety of Key Resources: Clients and Data

Your clients and your data are the two key resources that can be damaged in a sudden offset disaster.

Clients are obviously the core resource for your MFI's business. *Your MFI needs to undertake a quick estimate of the extent to which your clients have been affected by the disaster and the extent to which this might impact their business with your institution.*

Key Actions: Day 2

1. Estimate potential risk exposure
2. Plan client survey
3. Establish crisis room

The first step in this process is to determine the locations that were most affected by the disaster . Cross-referencing news or government reports on affected areas is an obvious starting point for identifying the geographic impact of the disaster . This can be followed up by visual surveys of the affected areas by car. Information should be stored in tables that show population and number

of clients by geographic code. A map pinpointing areas affected and estimates of total population, and the degree of damage suffered should be created to help understand the scope of the disaster and to plan responses.

The second step is to generate a rough estimate of the number of affected clients and their total loans outstanding. This is done by matching data on clients by location to the badly damaged or affected zones to obtain the number of clients that might be affected, and the outstanding balances of their loans³. A very simple chart can give a quick indication of your risk exposure, as can be seen in the sample table below:⁴

	Number	Loan Balance
Total clients	10,000	950,000
Clients in Affected Zones	2,000	300,000
Percent of Clients Affected	20	31.6

³Client databases often do not contain information that allows you to easily match clients to location. In El Salvador, because of USAID/El Salvador requirements to report clients and activity by *municipio*, the MFIs had fields in their data bases that allowed them to develop lists and subtotals of loans outstanding by *municipio*. Since we knew from government reports which *municipios* had suffered damage, and how severe the damage was estimated to be in those *municipios*, this was sufficient for obtaining initial estimates.

⁴It may be possible at this stage, and would certainly be desirable, to create a more elaborate table by expanding the second line of this table to show affected clients and loan balances by the affected geographic regions.

At first glance, this sample MFI runs the potential risk of losing 31.6 percent of its portfolio. This estimate will be refined later, but it is critical in the first few days to have an idea of whether you are facing a major or a manageable situation.

At the same time, your MFI should plan a survey of clients in affected areas to refine your estimate of the potential exposure to risk in your portfolio (see sample in Annex B). In this survey you need to determine:

- How many of your clients suffered damages?
- How severe were the damages they suffered (life, health, homes, business)?
- What immediate concerns do they have, and what kind of immediate assistance do they need?
- Do they have sources of income that will help them weather the crisis?
- Will they need to access cash – withdrawing savings, other loans, etc.?
- What is their attitude toward and ability to continue making their loan payments?

At this stage you need to assign responsibilities for drafting a survey instrument, and for carrying out the survey.⁵

Data on clients, portfolio and accounts is the second most important key resource that you cannot afford to lose. Without information you may not be able to operate. Your computer system and data stored on computers may well be lost in a disaster. Ideally, you should have already have backup copies of data and operating systems stored offsite, perhaps in several locations. Paper records, such as legal documents, loan files, and the like, may be even more vulnerable to damage or destruction in a sudden onset disaster. Most MFIs cannot afford the level of redundancy and parallel processing common in large-scale financial institutions, but at a minimum, daily backup copies of your data and a copy of your operating system and application program should be stored in protected sites away from your offices.

An extreme example of backup of critical data could be seen during the September 11 crisis in the United States. Many banks, financial companies and other transaction-oriented enterprises had fulltime parallel systems running in remote sites far from New York City. They were able to recover quickly because of the redundant systems. In contrast, companies that relied on paper files, such as attorney's offices, had a very difficult time recovering because they lacked the ability to back up important papers and documents.

Your MFI needs to assess the status of your information systems and determine what needs to be done, if anything, to bring it back to full operations with current data. If your system has been affected, once you restart it run a set of end-of-day reports to use as a basis for verifying balances and correcting missing information.

You may find that you will need to work with paper-based manual files in the short run. Some information systems are designed to print out a full set of data on individual accounts at the end of every day so that these can be used to continue business while the computer system is compromised. In extreme cases you may need to: (1) purchase new computer equipment, (2) reinstall the operating system

⁵Details on conducting the survey are contained in the description of Step 10.

and application programs, (3) reload data stored in offsite locations, and (4) manually update information to bring your information system up to date.

The key questions you must address are:

- Do you have the information needed to run your business and provide service to clients?
- What must you do to recreate the information needed to run your business and provide service to clients?

5. Determine Immediate Actions

The stocktaking exercises will quickly reveal the actions you need to take to ensure the safety and sustainability of your MFI.

Of a purely practical nature, reestablishing a place of business may, in fact, be the paramount need for immediate action. You must decide if you can continue to function in your existing facilities (including branches), or if you must seek temporary quarters elsewhere. Do not take chances estimating whether or not your buildings are stable, contract with a local engineer to conduct an evaluation of whether or not your building is safe for occupancy.

Key Actions: Day 3

1. Decide on immediate steps to maintain or restore operations.
2. Review and establish policies
3. Communicate policies to staff

A disaster may break natural linkages between loan officers and clients. This is especially true in the case of death or disability of a loan officer in a village banking program, but it may also occur when the loan officer needs to attend to household problems, deaths in the family, or loss of transportation. You must recognize if there is a problem, and how to reassign staff or responsibilities to cover the clients of an affected loan officer.

Is your data processing system still functioning? Resolving any information systems and data processing problems is key to operating a financial institution. If the computer systems are damaged, or if data have been lost, you must focus quickly on reestablishing information services. If your entire data processing system has been destroyed, you must quickly purchase as least one or two computers and reinstall your backup systems and data to reestablish at least a minimal capability to process information. Temporary measures may necessitate manual processes, until the automated systems can be reestablished.

One of your key immediate objectives is to restore basic operations with the public as soon as possible – providing, at a minimum, mechanisms for loan repayments and for savings deposits and withdrawals (in the case of deposit-taking MFIs). If you have multiple branches, you will probably find that some, or even all, of the branches are in condition to function. How to open branches, which branches to operate, what the hours of service should be, how you will maintain security, how you will process information, and how you will process new loans applications – are all operational decisions that you need to address immediately.

6. Review and Refine Key Disaster Policies

A disaster will put a strain on routine procedures and policies., as your must deal realistically with the changed circumstances of its clients. Many clients may face temporary or permanent disruptions in income, and hence, ability to repay. Some of the policies that you may need to adjust are:

- Late Payments: You will want to allow clients to make late payments for missed payments directly caused by the disaster. These may include days a branch is closed or a loan officer is unable to make scheduled visits to the clients, as well as situations in which a client lacks access to transportation or has other problems as a directed result of the disaster.
- Penalties: Many institutions have late payment fees and penalties. You may want to relax these requirements to retain client loyalty.
- Refinancing: You will want to review your policies on refinancing loans, as the changed situation of its clients may require rescheduling.
- Grace periods: You may want to grant a grace period on payments of principal or interest (or both) to give affected clients an opportunity to regroup.
- Special financing: Clients may need special loans to rebuild assets or meet other immediate needs. You may have a policy against making second loans when one loan is active, but may need to grant exemptions to protect your existing loan.

This definition of policies may change several times during the course of a disaster, as client needs change and the situation is better understood. The policies should retain flexibility, and should be reviewed repeatedly during the next two to three weeks.

In each of these cases, the objective of any revised policy or procedures is to "perfect" existing loans and maintain client loyalty. You need to show your clients that you understand their predicament and will do your best to help them. At the same time, you must give a clear message that you expect your clients to honor their obligations to you as soon as they are able to do so.

7. Inform Employees about Policies and Procedures

Your employees need to know how to respond to client requests for information. They must know what the new or revised policies are, so that they can give clients consistent, accurate information. You should provide your employees with a brief guide (or brochure) to the new policies (and any old ones that are still applicable) to make sure that they are providing clients with current information.

At the same time, you need to encourage your employees to provide feedback to your *crisis task force* on customer complaints and suggestions, and on ideas of how to better accommodate client needs.

8. Prepare Monitoring System

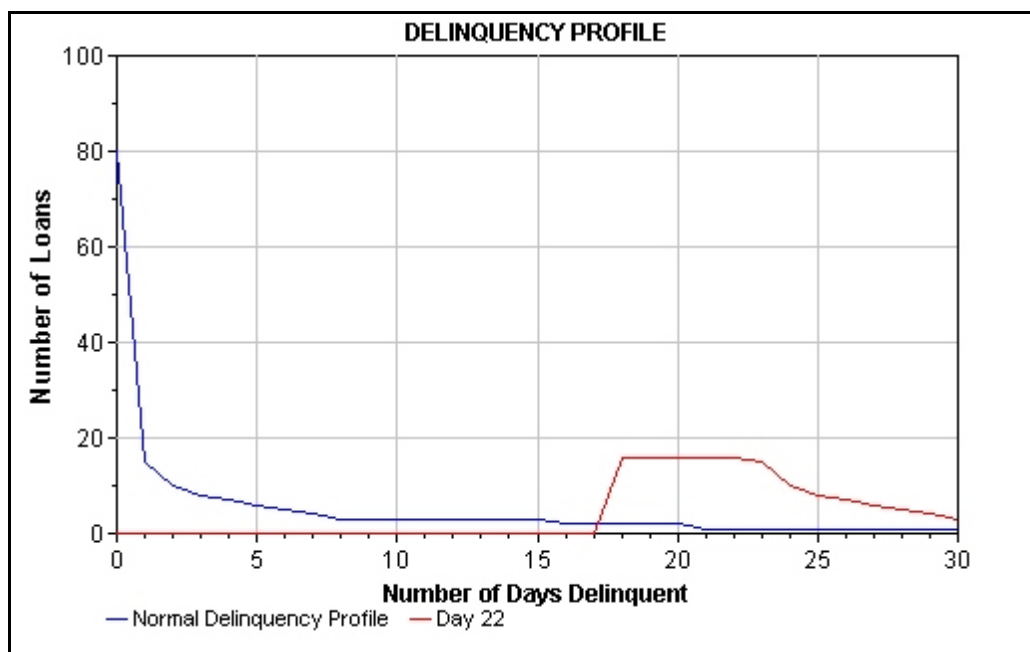
Regular monitoring systems will not be adequate to manage a crisis situation; both the timeliness and content of routine monitoring information will likely need revision. Two major revisions that will most likely be required are:

- Monitoring reports need to be prepared more frequently than normal; and
- Income and expenses should be tracked as actuals rather than accruals.

Frequency of Reports

Income, expenses, recuperations and loan demand are often not tracked at all in an MFI's daily monitoring and reporting systems; to the extent they are reported it is usually in month-end or quarterly statements. MFIs typically do not report loans as delinquent until one payment is at least 30 days overdue. Loan officers frequently receive updated information on their portfolios on a weekly basis.

In a crisis situation, however, tracking these data and tracking them more frequently becomes essential. Thirty days for reporting delinquency and seven days to receive an updated portfolio profile are too slow – especially if you have weekly or semi-monthly payment schedules. An institution with weekly repayments, for example, can have 100% of its portfolio go bad within the first weeks, yet normal delinquency reports will not indicate a problem until 3 weeks, as can be seen in the following graph. The normal delinquency profile is shown in blue. Twenty-two days into the crisis a report based on more than 30 days overdue would report very little delinquency, when the entire portfolio will be lost within the next 12 days. Tracking these data on a daily basis becomes essential because they serve as early warning indicators of impending problems and allow you to take remedial actions quickly.



Actuals versus Accruals

Accrual accounting is a powerful tool in normal operations, but a crisis situation is not normal. Tracking income on an accrual basis during a crisis situation prevents you from recognizing potential problems because it shows what you "should" be receiving. Adjustments to accruals are made later in the accounting cycle, so monitoring accrued income does not give you useful information about your situation. Collections, income and expenses should all be monitored during a crisis situation on the basis of cash.

Indicators to Monitor

The key items to prepare for a monitoring system are:

- *A snapshot of your MFI's portfolio and economic situation at the time of the disaster.* This should include the size of the portfolio, number of loans outstanding, delinquency profile, monthly income and expense estimates for the month in which the disaster occurred and for at least two months after that, and projected withdrawals and loan disbursements for the month in which the disaster occurred and for at least two months after that.
- *Daily projections of recoveries, income, expenses and loan disbursements for the month of the disaster and at least two months thereafter⁶.* These will be used to compare actual performance to original plans, and will provide an early warning system for problems that might occur. Needed projections can either be generated from the repayment schedule of existing loans, or from monthly budget projections divided by the number of working days in the month.

Key Actions: Day 4

1. Verify monitoring and tracking system
2. Prepare lists of clients, by branch, group or loan officer

Depending on the computer system you have, and its capabilities, you need to either create a program to produce a daily series of data on the key indicators or develop a spreadsheet to track these indicators (see Annex E for a discussion of indicator tracking and the specific forms and charts that need to be created). The key indicators to be tracked are: collections,

delinquency, income, and expenses. This program or spreadsheet needs to contain the projected and actual numbers, and it needs to calculate the daily and cumulative differences. It should also be able to produce charts and graphs that can be posted on the walls of the crisis room or used to update permanent charts on the walls of the crisis room on a daily basis.

Collections

Collections will probably fall dramatically during the first days of a crisis stemming from a sudden onset disaster. Your offices may be closed, which would prevent clients from making payments. Your credit officers may not be able to reach the clients to collect or record payments. Your clients may be so

⁶It is possible to make daily projections of these key data from budgets (dividing monthly projections by the number of days in the month) or from actual repayment schedules.

overwhelmed by the crisis they are facing that they forget to make a payment or put it aside as less important than dealing with the immediate problems that they face. Monitoring collections is important to make sure that loans do not fall into serious delinquency and that the habit of repaying is reestablished as soon after the incident as possible. A sample form to show the data that need to be collected appears below; a more detailed description appears in Annex F.

Date	Expected Collections	Actual Collected	Daily Difference	Cumulative Difference
1/01/01	100	80	-20	-20
1/02/01	100	75	-25	-45
1/03/01	100	60	-40	-85
etc.				

Delinquency

Establish a daily aging report for delinquency. Most MFIs report delinquency as anything over 30 days, but in a crisis situation you need to know the aging of the portfolio by days. The more frequent the payments (e.g., daily, weekly or biweekly), the more important it is to have information on a daily basis. The entire portfolio can be lost in one payment cycle – long before it ever shows up in normal delinquency reporting. The aging report would be a table like the one shown below:

Days Delinquent	Number of Loans	Outstanding Balances
0 (current)	100	100,000
1	10	2,000
2	5	1,000
.		
.		
.		
Over 30	10	2,000

Income and Expenses

It will probably not be feasible to track income and expenses on a daily basis, but every attempt should be made to track these data at least weekly. Once again, this can be set up as a worksheet

Date	Expected Income	Expected Expenses	Actual Income	Actual Expenses
1/01/01	100	80	20	100
1/08/01	100	75	30	110

Date	Expected Income	Expected Expenses	Actual Income	Actual Expenses
1/15/01	100	85	40	95
etc.				

The spreadsheet program can calculate a several additional columns, which can also be converted into graphs for easy display:

- Daily difference between expected and actual income;
- Cumulative difference between expected and actual expenses;
- Daily difference between expected and actual expenses;
- Cumulative difference between expected and actual expenses;
- Difference between expected and actual gross margin.

You need to make sure that your computer system is capable of producing the needed data on a daily or weekly) basis. This includes the key indicators, the aged delinquency report and a daily listing of client status by loan officer (and group, if appropriate). This is critical for managing the situation. If a bank is processing your repayments and you receive information second hand from that bank, your information may run several days late, but every day's lag in reporting and monitoring increases your risks.

9. Develop and Initiate a Communications Strategy

MFIs often do not have much experience in public relations, However, much of your ability to function depends on the attitudes and impressions that clients and other members have of your MFI. If you are viewed as a safe and sound institution, people will trust you; if not, they will abandon you.

There is a special need to communicate more during a period of crisis. Communication is important to:

- Maintain confidence in your institution;
- Manage expectations; and
- Maintain client loyalty

You should carefully plan what and how it will communicate. The key content of communications must be to:

- Convey image of financial stability – clients and other members of the public need to have confidence that you are capable of surviving, and that you are effectively managing the situation;
- Convey solidarity with affected clients – it is important that you are perceived as caring for the well-being of your clients, not just in recuperating its funds;
- Convey compassion and willingness to adjust conditions as long as clients continue to meet their obligations; and
- Convey factual information about the policies and procedures you intend to follow – that loans will not be forgiven, that grace periods and loan rescheduling will

depend on individual circumstances, that clients needing help should come to your main office to discuss their situation, etc.

How to communicate is as important as what is to be communicated. Communications channels are themselves often damaged in disasters. Whether to use loudspeakers, posters, newspapers, radio, television, or door-to-door campaigns depends on availability and local customs. Remember that certain media are more successful in reaching specific audiences than others.

10. Initiate a Client Survey to Assess Risk

The first step in determining the risk a disaster poses to your loan portfolio is to determine which clients were affected and how serious their losses were. This activity may begin during the first week, but actually collecting and analyzing the information will take a longer period of time.

To verify the initial rough estimate produced in Step 2, above, you will need to conduct a more detailed analysis of your clients in affected zones. First, you need to prepare a listing of potentially affected clients – subdivided by branch, or loan officer, or group, or whatever other category is appropriate – especially for clients in areas that

were affected by the disaster. The list needs to contain names, addresses and other contact information, existing loan balance, loan status as of the day of the disaster, and next scheduled payment date and amount⁷. Your loan officers will use these lists to survey and follow up with clients.

Key Actions: Day 5

1. Initiate client survey
2. Prepare tracking charts

Armed with the lists, loan officers should contact clients in the affected areas to assess their situation and evaluate the repayment capacity and commitment of the clients. The specific questions that need to be addressed in this survey include:

- What damage and loss has the client suffered – in terms of life, health and property? What is his/her current situation vis-a-vis shelter, clothing, food and possessions?
- What immediate assistance, if any, does the client require?
- What impact will these losses have on income and expenses? Are there other sources of income that might substitute for any lost income from the microenterprise? How will the disaster affect expenses?
- Will the client be able and willing to continue servicing his/her loan?⁸ What considerations (such as a grace period or a rescheduling of the loan) might he/she need?

⁷At least one of the MFIs in the FOMIR/DAI project found that it had not kept its client name and address information current, and had to go door to door to ask people if they were clients or not.

⁸ Note that this is a highly subjective question that will require the judgement of the loan officer.

- Will the client need to access (withdraw) savings or obtain additional loans to be able to rebuild and sustain an income flow that will allow him/her to service his/her current loan?
- Is the client likely to remain a good client or does the loan require more careful monitoring?⁹

There are obviously sensitivities involved in interviewing clients who have just experienced a major disaster. The interviewer must:

- be sensitive to the losses the client has suffered, and be sympathetic to the client's predicament;
- stress that your institution wants to help the client recover;
- not raise unwarranted expectations of gifts, special considerations or additional funding; and
- not give the impression that your MFI will stop collecting or forgive debt.

Analysis of these surveys will allow you to update your estimates of potential risk, and to focus on those areas or groups that constitute the greatest risk of default.

⁹Again, this will require the loan officer to make a judgment of the client.

WEEKS TWO TO FOUR: MANAGING THE RESPONSE

Some activities from week one (especially the survey of affected clients) will still be in progress in week two.

Weeks two to four consist of largely repetitive tasks of monitoring, analyzing and following up with clients. As you gain experience and becomes more certain of the situation, it will become clearer whether or not loan rescheduling, backup lines of credit, and other special measures are required.

Daily Meeting of the Crisis Task Force

The crisis task force should meet every morning during this period to review data, identify problems, and decide on actions to take. The data they will need to see are:

- Daily aged delinquency report;
- Recoveries for the previous day compared to plan, and cumulative through the previous day compared to cumulative projections;
- Income and expenses compared to planned income and expenses, both for the previous day and cumulative through the previous day;
- Withdrawals (if appropriate) for the previous day and cumulative through the end of the previous day;
- Loan disbursements compared to planned disbursements, both for the previous day and cumulative through the end of the previous day;
- New loan applications compared to planned loan applications, both for the previous day and cumulative through the end of the previous day;
- Special requests for consideration by clients, both by number and type of request; and
- Comments from loan officers on the status of clients.

Reviewing Trends

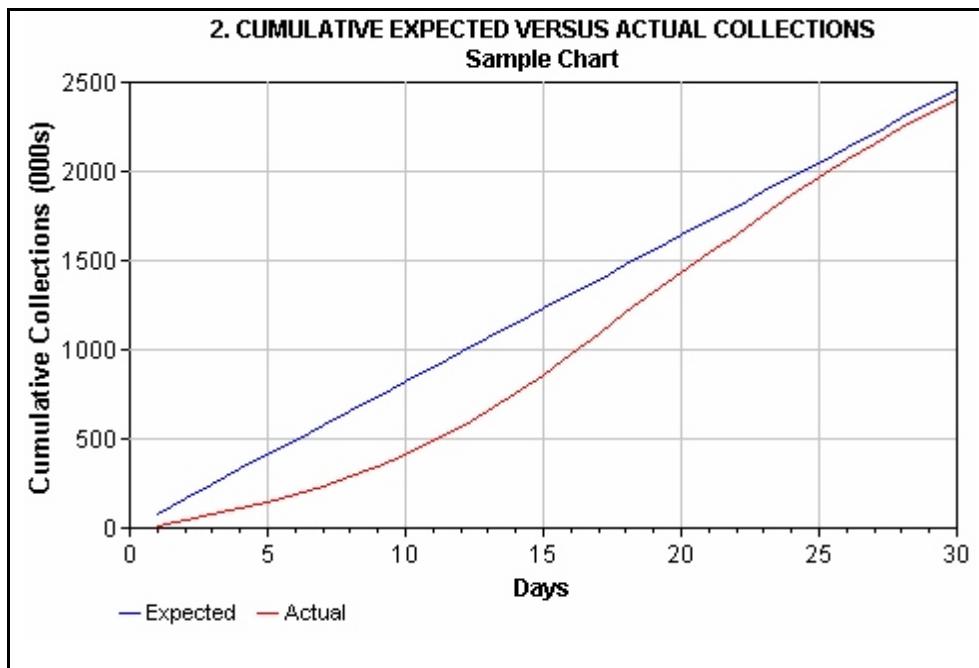
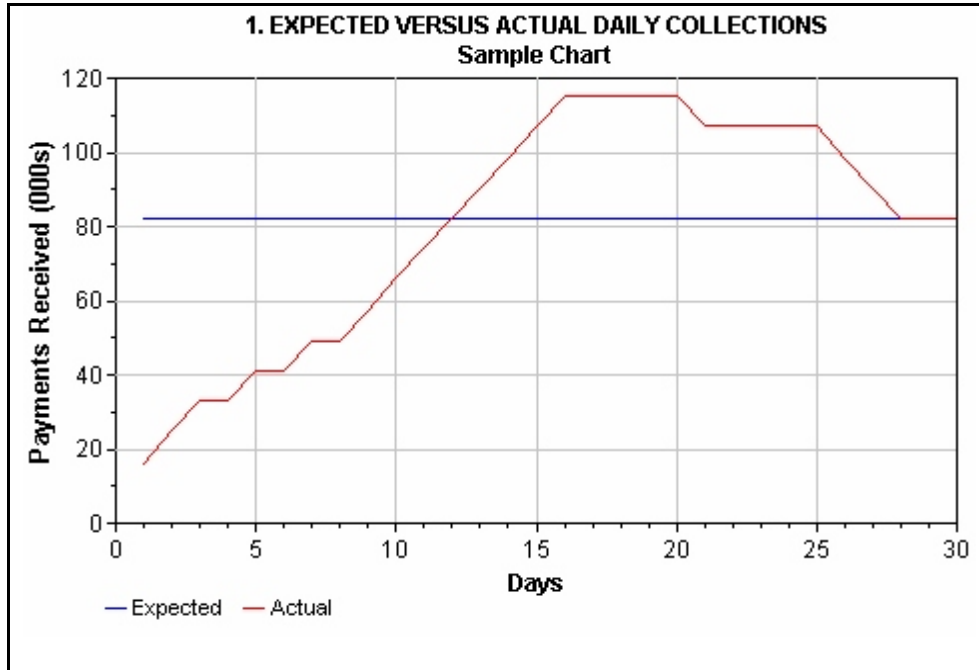
The crisis committee needs to review key indicator performance and determine implications of trends on a daily basis to answer the essential question: is the situation improving or deteriorating? The graphs presented on the next few pages illustrate the trends that you might expect to see in your data as the crisis matures. The timeframe for the graphs has been shortened from what might be a more realistic situation to highlight the data. The graphs would be updated daily during the crisis.

Key Questions to Ask

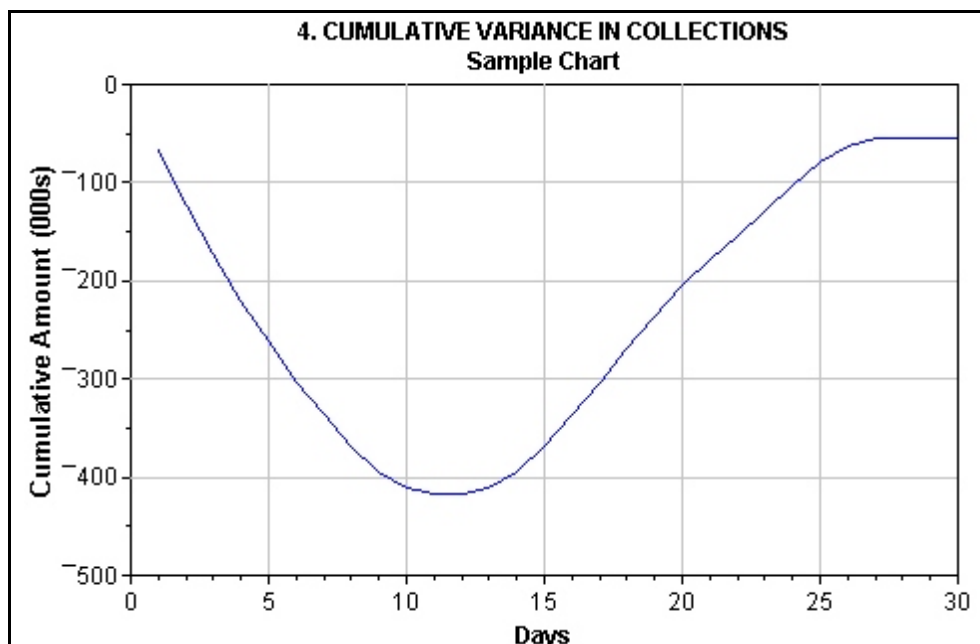
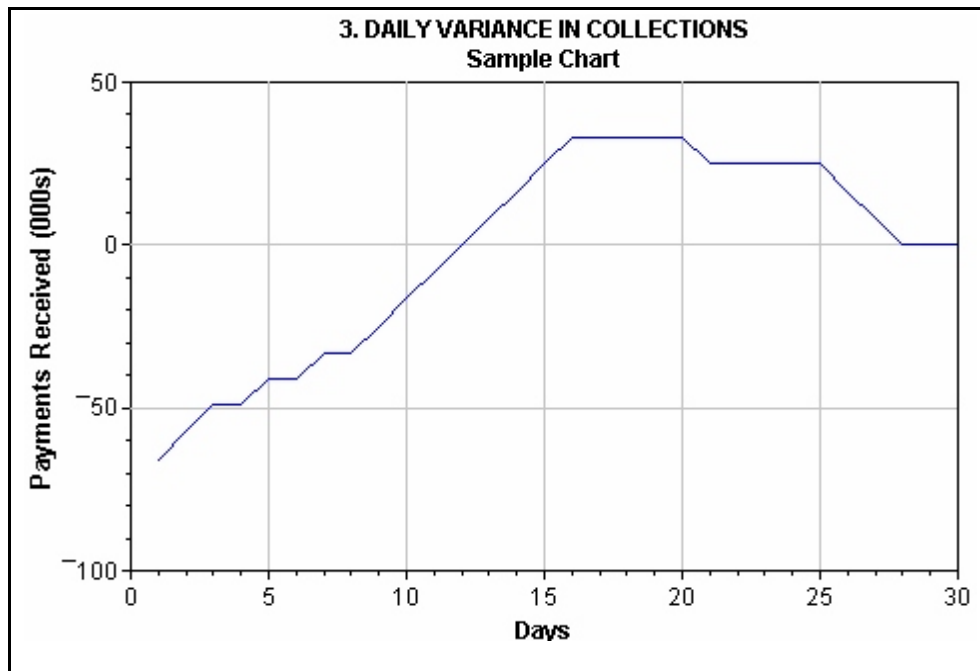
1. Are collections improving or falling further behind?
2. Is delinquency becoming more serious or less serious?
3. Will income continue to cover expenses?
5. Are loan requests increasing or declining?
4. Is liquidity becoming a problem?

Collections, Illustrative Graphs

The two graphs on this page show a typical pattern of collections in the aftermath of a major natural disaster. In Chart 1, below, actual collections are considerably below expected during the first few days, then accelerate until actual receipts exceed expected receipts as clients begin to make up their previously missed payments. Once previously missed payments have been collected, recovery rates return to normal. In Chart 2, the difference between expected and actual continues to balloon until actual payments exceed expected payments and clients begin to cover their previously missed payments. There is a permanent difference between actual and expected due to defaults.

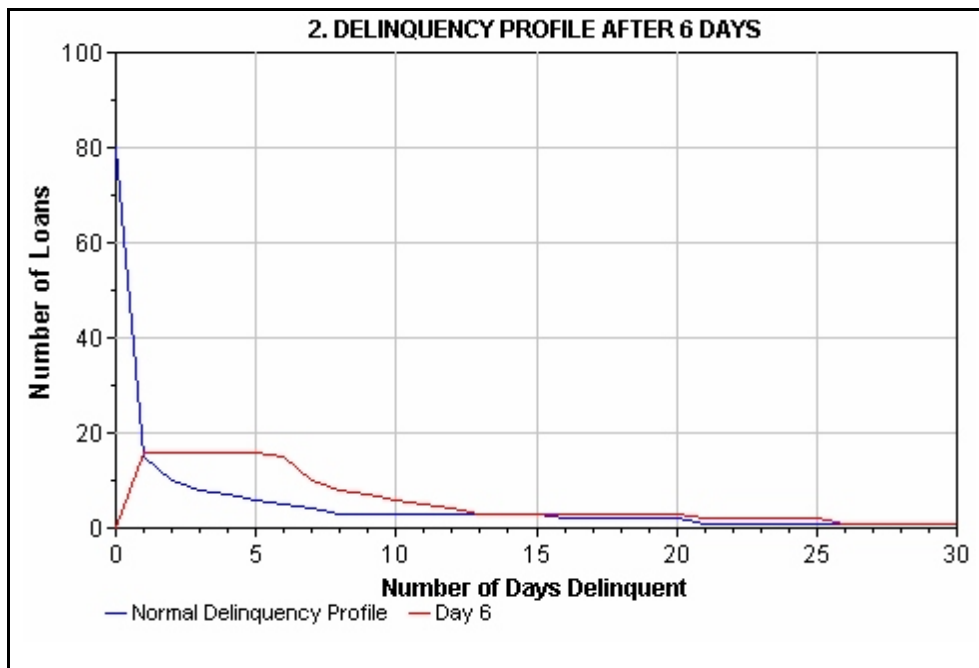
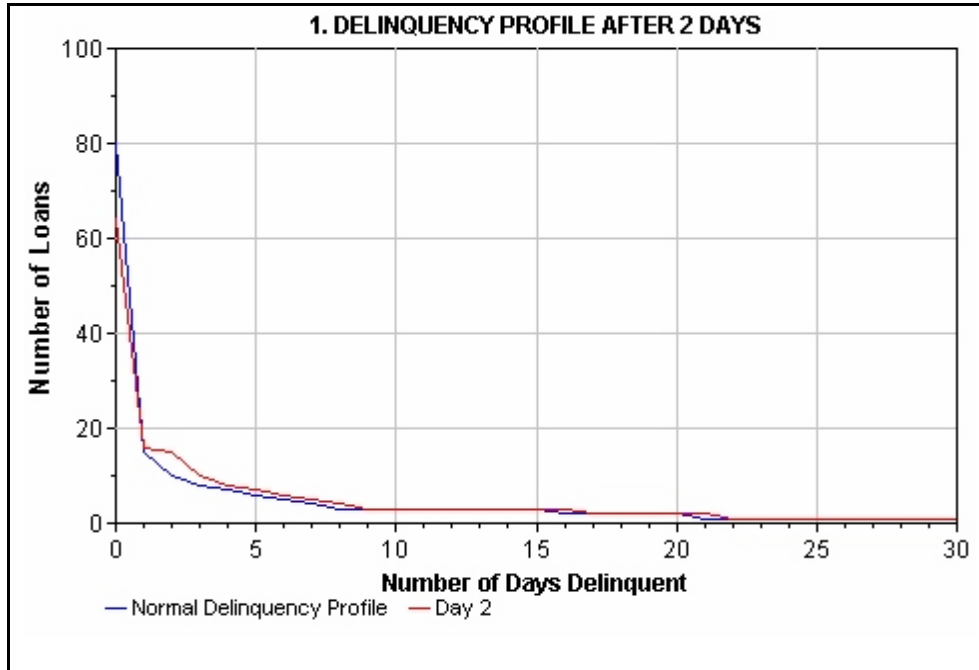


Two other charts can be useful for understanding the impact of a disaster on your collections. Chart 3, below, shows the daily variance between actual and expected collections. On day 1 collections were 70,000 below what they would normally have been; collections improve until on day 13 they begin to exceed expectations, which shows that you are beginning to recover some of the backlog in missed payments. Actual payments exceed expected payments until the backlog is worked out, and then return to normal. Chart 4 shows the magnitude of the shortfall in collections. Notice that, at the maximum shortfall before the portfolio begins to recover, you would have collected about 420,000 less than you should have.

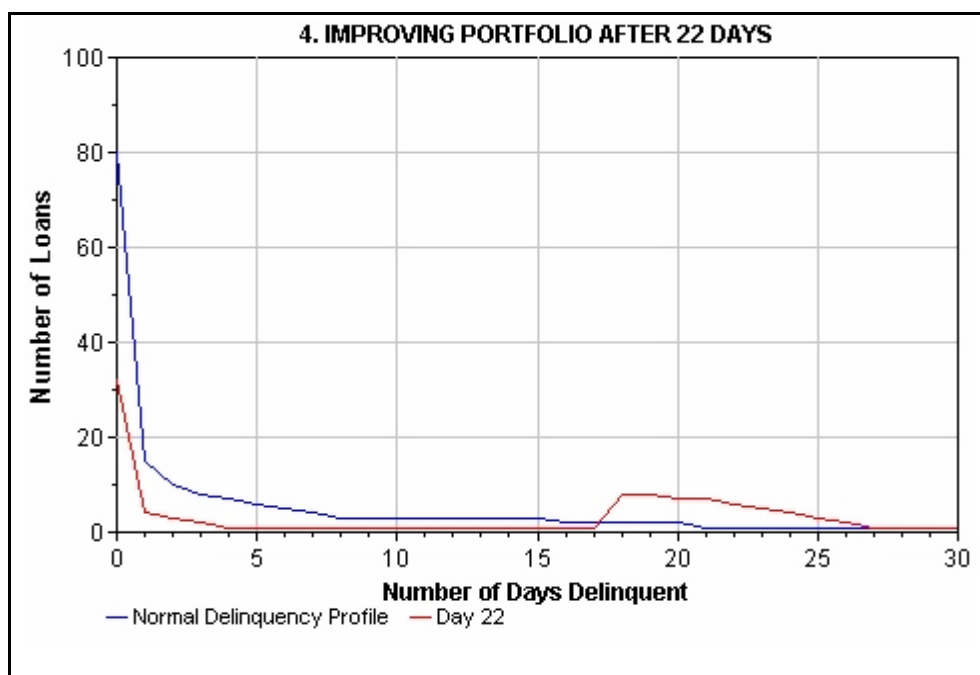
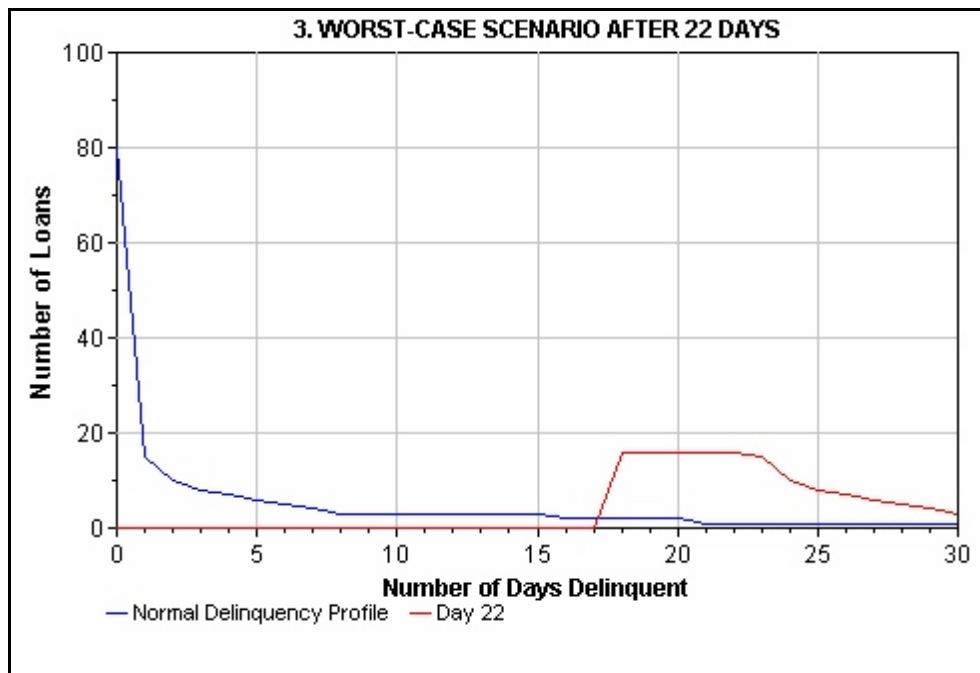


Delinquency Monitoring, Illustrative Graphs

Monitoring delinquency is especially critical because a portfolio can go bad very quickly, especially for institutions that have very rapid repayment schedules. The following examples show what can happen to an institution with a weekly payment schedule, when its offices are closed for a week. In Chart 1, below, a noticeable bump in delinquency appears almost immediately following the disaster. By day 7 (Chart 2) the entire portfolio is at least one day delinquent and the institution has no performing loans. A delinquency report that only showed loans as overdue when they are at least 30 days overdue would show no increase in delinquency when, in reality, the entire portfolio is at risk.

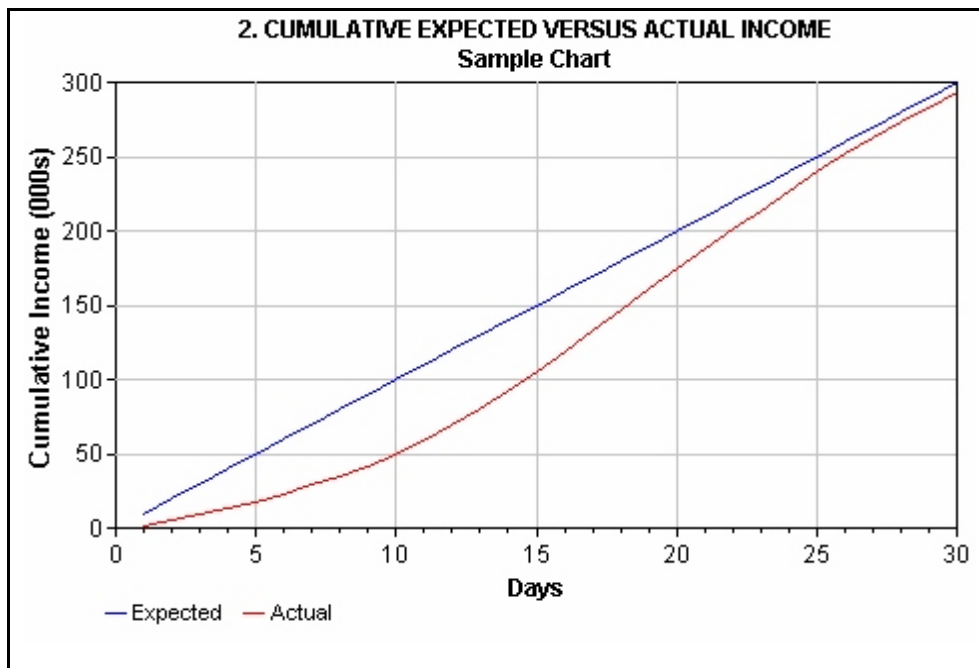
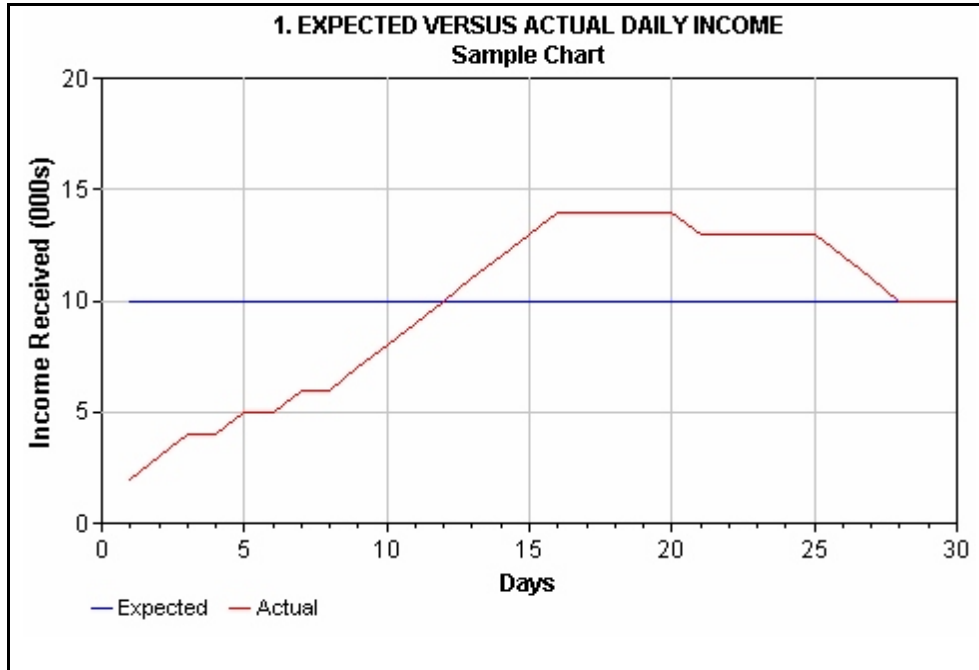


Left unchecked, a portfolio can be on the verge of being lost in a very short period of time. In Chart 3, below, the institution has no performing loans, and no loans that have had payments within the last two weeks – two complete cycles. The entire portfolio will become delinquent (more than 30 days) within the next 12 days, but a delinquency report generated at this time that only classified loans as delinquent if they were more than 30 days overdue would show no problems with the portfolio. Chart 4 shows the type of pattern you would hope to find in a recovering portfolio. The number of performing loans has increased as clients are beginning to repay, and the size of the bump is smaller than in Chart 3, showing that many of the problem loans are beginning to be resolved.

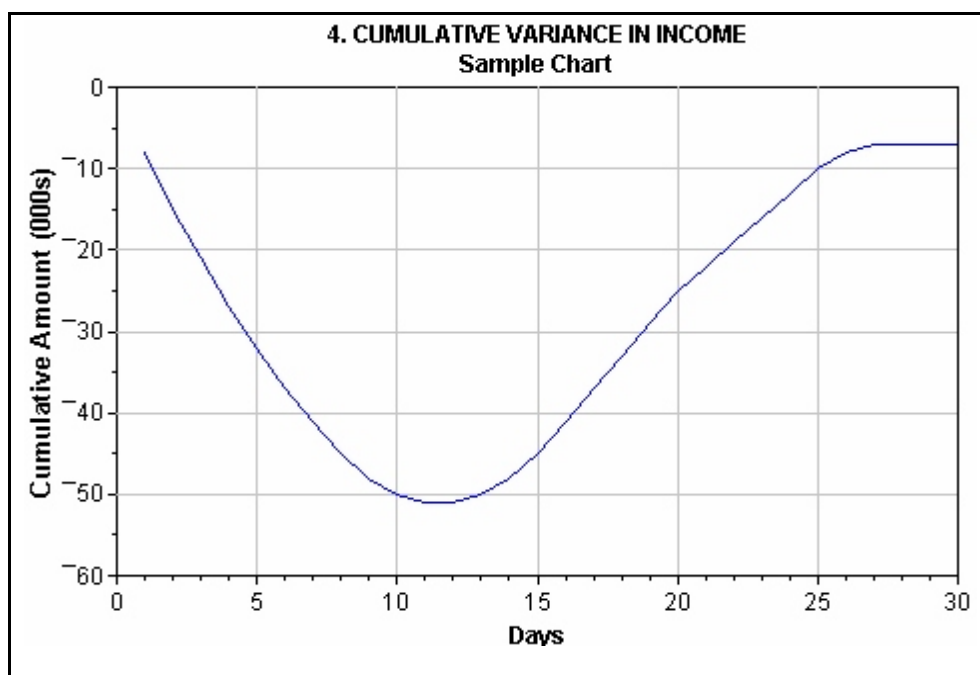
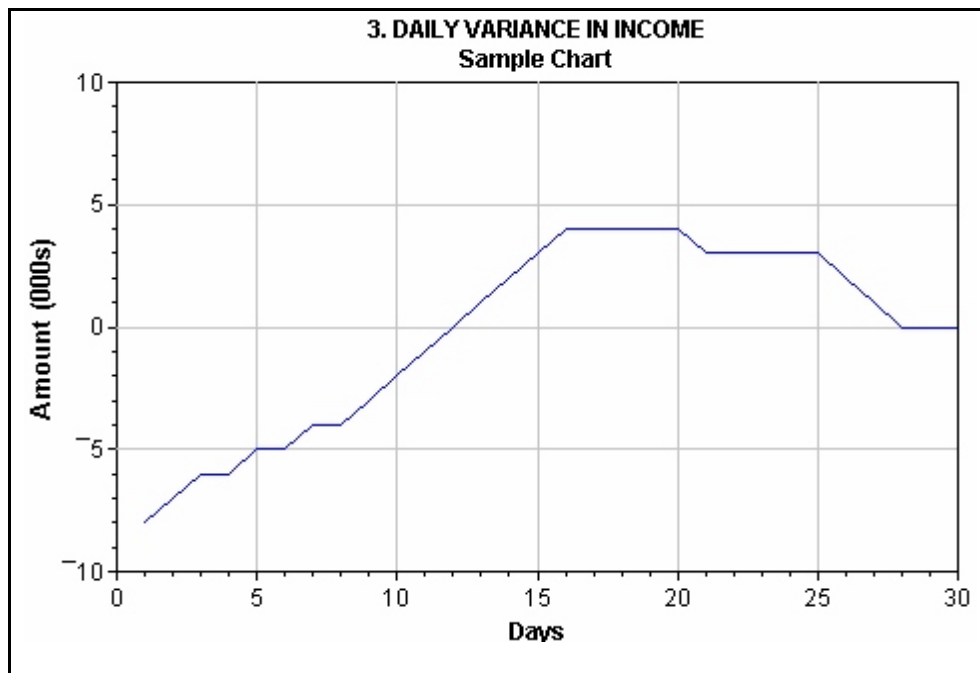


Income, Illustrative Graphs

The two graphs on this page show a typical pattern of income in the aftermath of a major natural disaster. In Chart 1, below, income is considerably below expected during the first few days, then accelerates until actual income exceeds expected income as clients begin to make up their previously missed payments. Once previously missed payments have been collected, income returns to normal. In Chart 2, the difference between expected and actual income continues to balloon until actual income exceeds expected income and clients begin to cover their previously missed payments. There is a permanent difference between actual and expected income due to defaults.

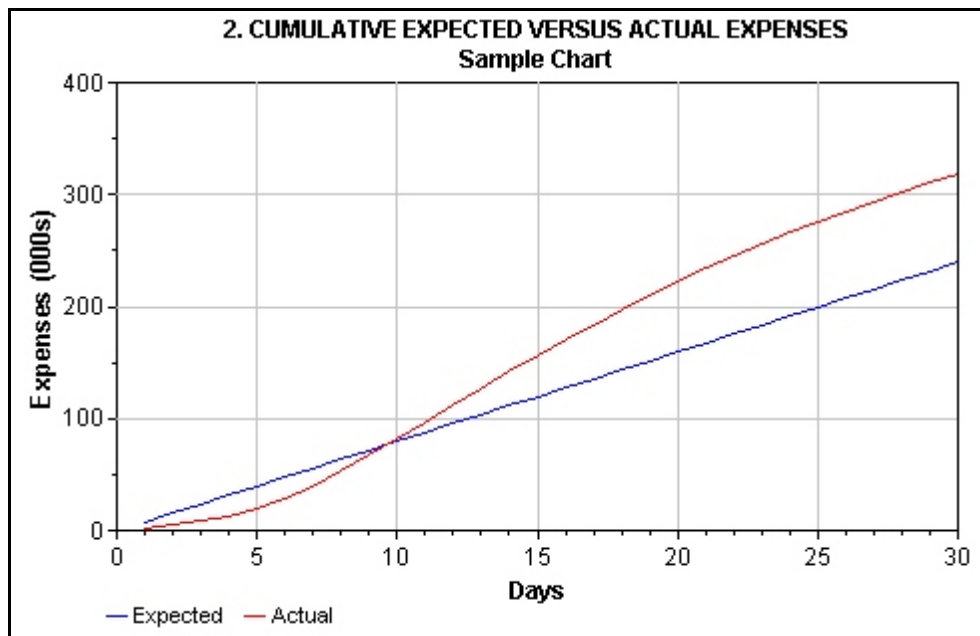
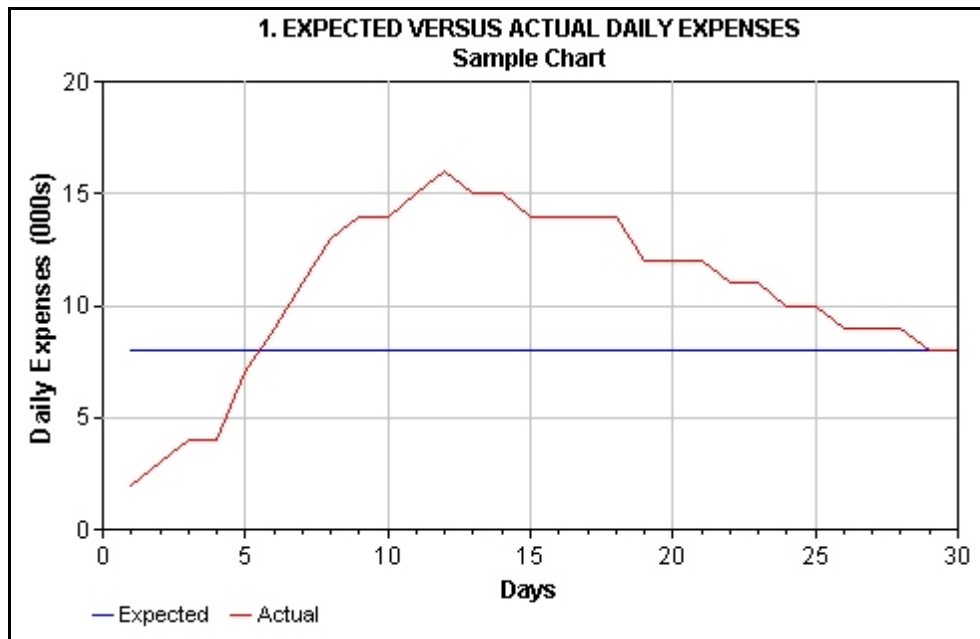


Two other charts can be useful for understanding the impact of a disaster on your income. Chart 3, below, shows the daily variance between actual and expected income. On day 1 income was 8,000 below what it would normally have been; income improves until, on day 13, it begins to exceed expectations, which shows that you are beginning to recover some of the backlog in missed payments. Actual income exceeds expected income until the backlog is worked out, and then returns to normal. Chart 4 shows the magnitude of the shortfall in income. Notice that, at the maximum shortfall before the portfolio begins to recover, you would have received about 51,000 less in income than your budget would have projected. How will receiving this much less in income affect your ability to meet payroll or other expenses?

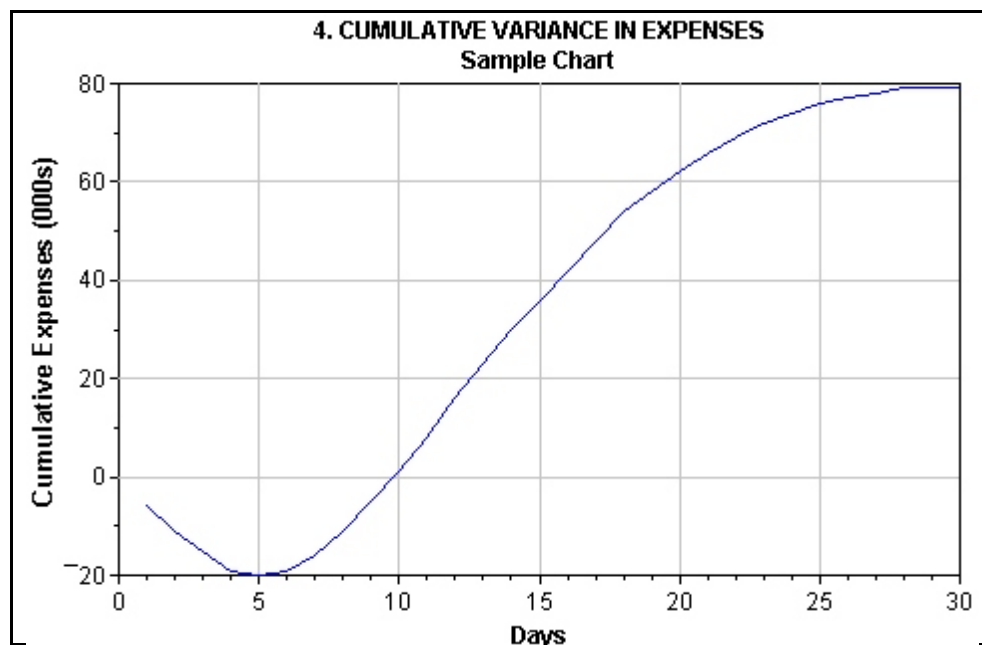
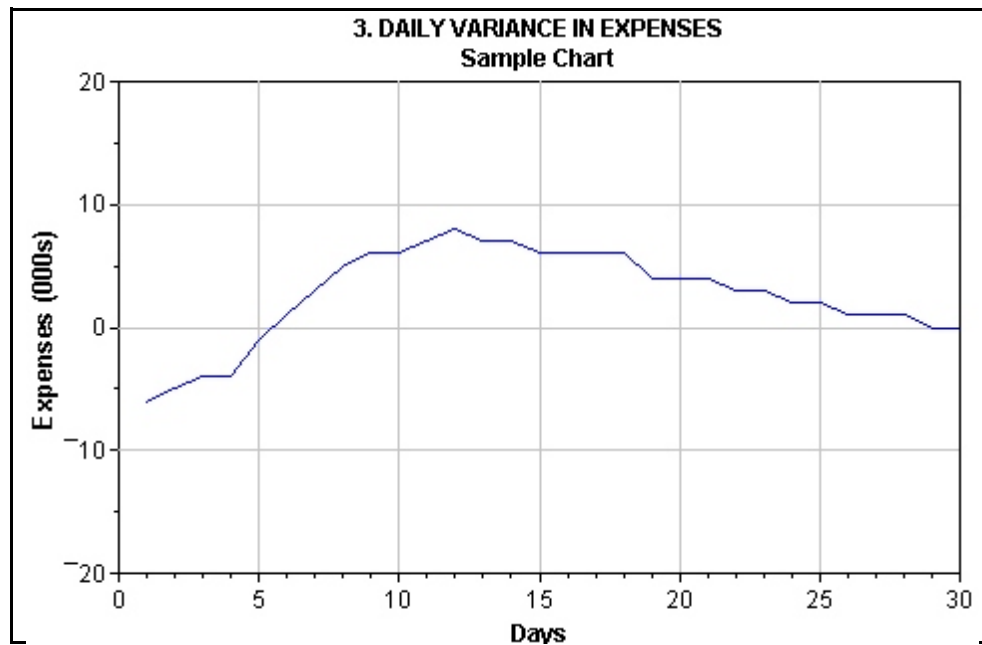


Expenses, Illustrative Charts

Expenses can be expected to rise in the aftermath of a major disaster, but unlike income, which is constrained by the size of the portfolio, the rise in expenses has no theoretical limits. For this reason it is important to monitor expenses in the aftermath of a crisis. The two charts on this page illustrate how expenses might be affected by a disaster. Initially expenses might fall below expected levels (Chart 1), as business is curtailed in the immediate period following the disaster, but they would rise quickly above budgeted expense levels as you are faced with the need to pay for additional security, repairs, relocation, etc. As Chart 4 shows, the gap between expected and actual expenses is probably a permanent gap, as almost all expenses related to the disaster represent unbudgeted costs.

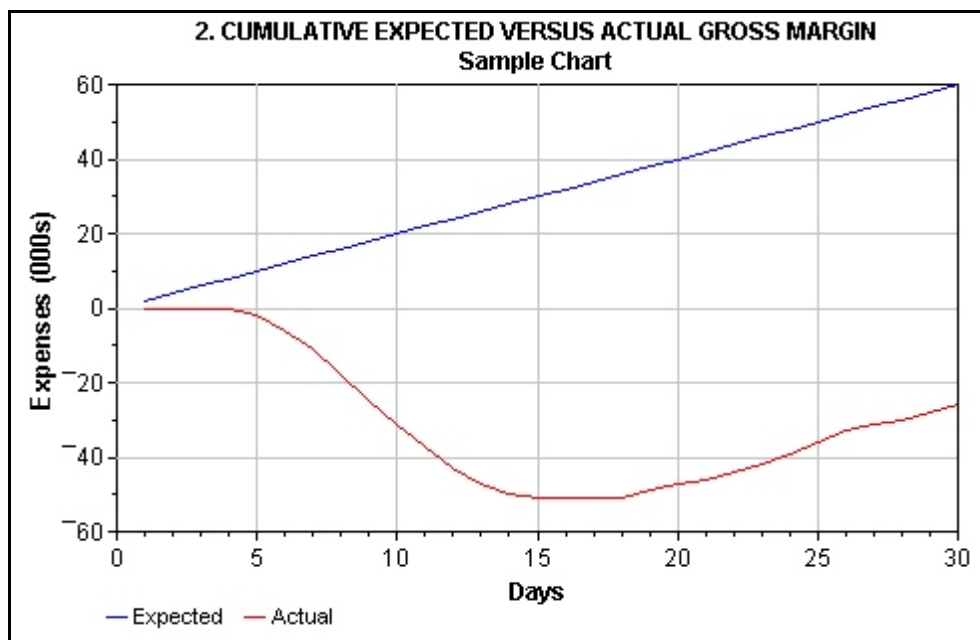
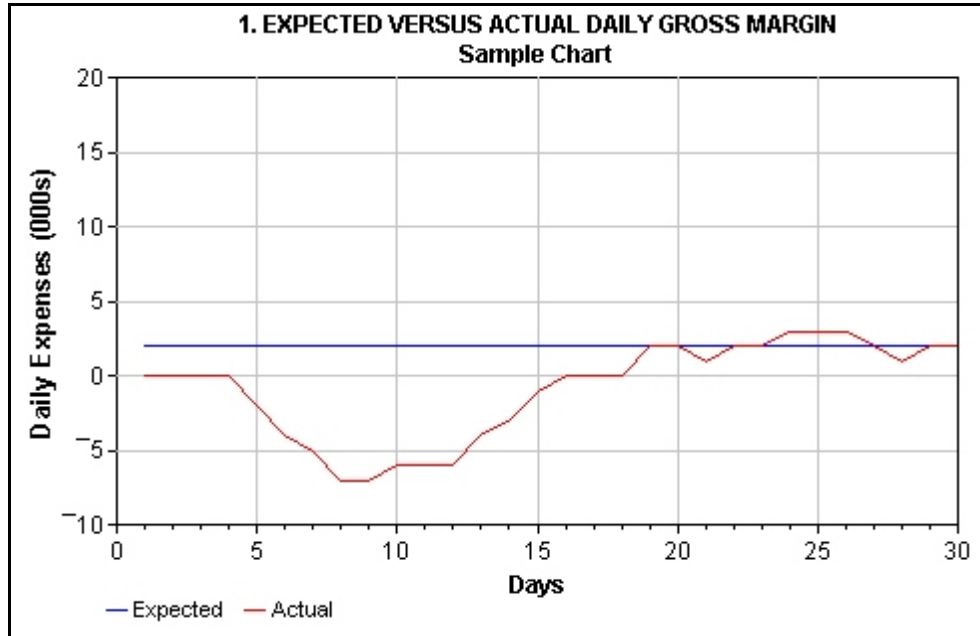


On a daily basis the difference between planned and actual expenses may not appear to be very significant (Chart 3). But, because all of the expenses were unbudgeted and represent additional costs, the cumulative effects can be very significant. In the case of this hypothetical institution, the cumulative increase in expenses (Chart 4) is 80,000. This can be a very significant sum.

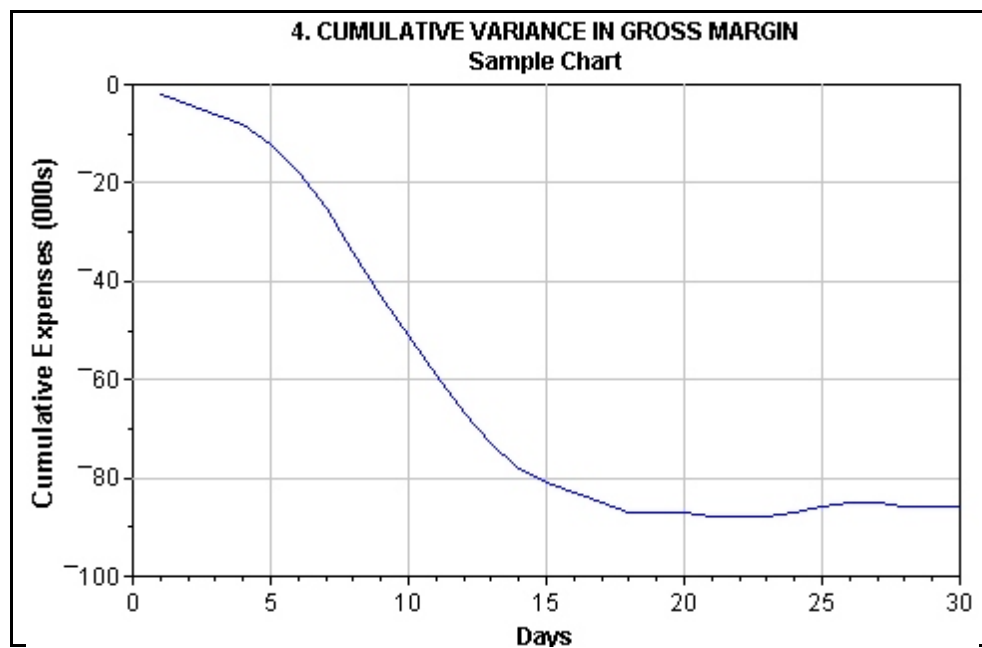
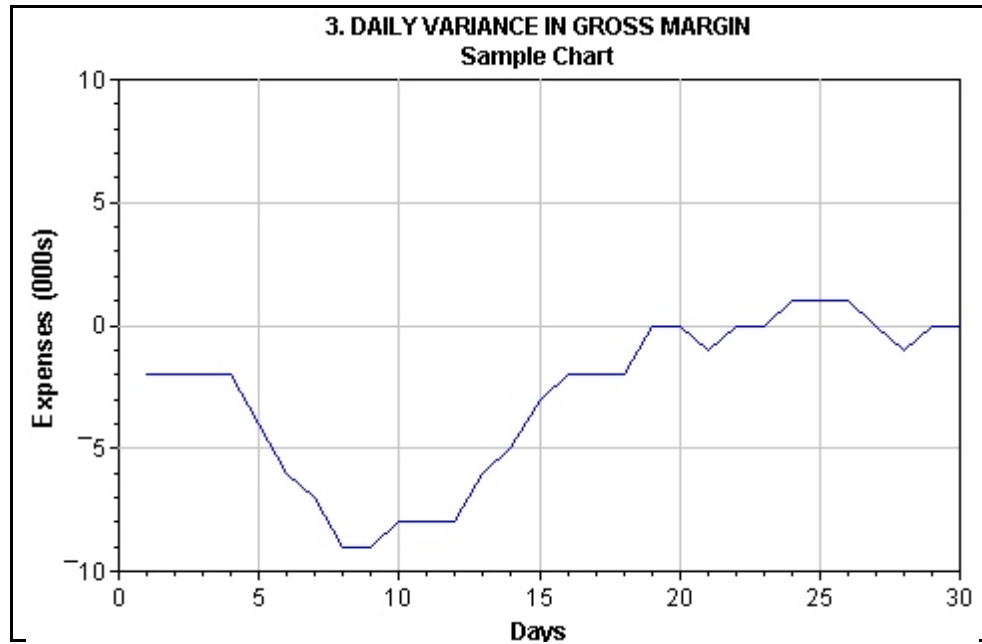


Gross Margin

Of course, the impact of reduced income and increased expenses can be seen in the bottom line of the MFI's income statement. Gross margins – the simple difference between income and expenses – can threaten the solvency of the institution. In this case gross margin is initially only slightly negative, and then falls significantly, and then recovers to near normal (Chart 1). But the cumulative effects are highly significant (Chart 2): instead of a 60,000 profit for the period, our hypothetical institution had a loss of more than 20,000 – a difference of over 80,000.



This negative impact on margin can be seen clearly in Charts 3 and 4. Although the daily variance between expected and actual appears manageable, the cumulative effect is quite large. This situation can produce a severe liquidity problem for an MFI.



Assessing the Trends

There are, of course, other indicators that can be tracked during a crisis. New loan demand, placements, and withdrawals can all be tracked in a similar fashion.

Based on the results of the daily data review, you need to reestimate the magnitude of problem you are facing. How many loans, and what amount, are you likely to lose and have to write off? Will you have the liquidity to meet requests for withdrawals, and where will additional funds come from?

Apart from the broad questions and issues, the crisis committee should review the data on a more microscopic level. Are specific groups or locations having a greater problem with delinquency than others? Are some loan officers experiencing greater problems with collections than others? These differences will show you where to focus attention.

Refining Strategies

At least once a week you will need to take the results of the review process and use its conclusions to refine your strategies for coping with the crisis. These include:

- How best to organize for managing collections? Will you need to assign additional staff to follow up in problem areas? Will you need to assign other staff to cover for an incapacitated loan officer?
- Will you need external funding to meet obligations, and how much will you need?
- Will you be able to meet reserve requirements (in the case of regulated institutions), or will you need to make special provisions for reserving?
- How can you meet your liquidity needs – both to cover withdrawals and to meet new anticipated loan requests?
- What percentage of your portfolio will need refinancing or restructuring, and what impact will this have on income, cash-flow and delinquency?
- Do you need external financing to cover any of these needs, and if so, what are your options for obtaining external financing?

The answers to these questions may change frequently, as conditions with the clients change.

Protecting the Portfolio

Protecting the portfolio is one of the critical tasks during this period. Your MFI needs to focus on the problem loans – on clients that want to pay, but are having difficulty meeting payments.

Follow up on collections of problem loans. You should see a list of overdue loans by loan officer every morning, and focus your attention and the attention of your crisis committee on those groups of loans that represent the greatest potential loss. You may need to assign additional officers to follow up with problem loans – especially if most of the damages occurred in areas served by a few officers. You may

need to visit those clients personally, or have another high-level manager visit them to better understand the reasons for the delinquency and to suggest solutions to help them meet payments.

During this period you need to plan and work on a policy and procedures for rescheduling or refinancing loans. Rescheduling loans may be necessary to give a good client the time to recover from the effects of the disaster and become reestablished in his or her business. Refinancing may be a valuable tool to assist clients who need additional resources to reestablish their businesses.

At the same time, you need to be firm. Banco Solidario in Ecuador improved its on-time payment statistics during a period of extreme financial crisis by only making new loans available to people who had kept to their established repayment schedules.

And, you must be prepared to write-off loans that appear uncollectible due to the death or disappearance of clients.

Search for New Opportunities

At the same time, you need to be on the lookout for new business opportunities. These can come from within your existing client base -- with new services or programs to suit needs that arise from the damage they have suffered. Or, they can come from people who have not been clients of an MFI, but who suddenly find they need a loan, or other financial services. Or, these opportunities can come from clients of other institutions that are unable to meet their new need for services.

Communicate

Most of all, communicate. Make sure affected clients are aware of options available to them and of your MFI's policies for refinancing. Make sure that clients understand what your policies are. Make sure that your clients have faith that your institution is solid and will be there to work with them in the future.

AFTER THE FIRST 30 DAYS: RETURNING TO NORMALCY

The first 30 days of a short-duration, sudden-onset disaster is the period that can make or break your MFI. Following that period you can begin to shift from crisis management to stabilization. Returning to normal may well involve steps to restore capital and liquidity, regain normal servicing of loans, working with clients to rebuild their assets and businesses, and developing new products to meet new client needs. Some of the specific actions that might be required during this period are:

- Negotiate backup liquidity or stand-by lines of credit if needed. Access to other funds may be needed to meet withdrawals, implement a new loan product (such as housing or productive assets, or simply to meet increased loan demand).
- Obtain a guarantee or set aside reserves to meet reserving requirements (for regulated institutions. Rescheduling loans may trigger increases in reserve requirements that can only be met by cannibalizing the loan portfolio or external (non-loan) funding. Guarantees may help resolve this problem if other funds are not available.
- Work to help clients access other sources of assistance to meet non-financial needs for rebuilding shelter, obtaining donated clothing and food, etc. To the extent that outside assistance can help clients solve basic shelter, clothing and food needs – household funds that might be diverted to those purposes becomes available for investing in rebuilding their businesses and servicing their loans.
- Consider introducing new products – especially home improvement and housing loans, and loans for equipment and facilities for microenterprises – to meet the changed needs of clients. Clients will often need funds for activities other than traditional working capital as they rebuild their lives. Rebuilding a house requires longer-term financing in amounts greater than what a typical MFI normally offers. To be able to make housing loans you may need to develop a new loan product, with a different maximum, a different interest rate, and a different repayment schedule than you normally offer. Purchasing a piece of equipment to replace one damaged in the disaster may require a new loan product on your part. To cover any of these demands may require you to seek external funding.

In El Salvador, rescheduled loans require a 100 percent cash reserve. One institution needed to reschedule about 25 percent of its portfolio, requiring about \$6.0 million in new reserves. These were only needed for a short period of time, as clients quickly began repaying the rescheduled loans and virtually no losses occurred. A USAID guarantee program helped the institution meet this temporary reserve requirement at minimal cost.

MINIMUM DISASTER PREPAREDNESS

Sudden onset disasters are difficult to prepare for, unless they are disasters that occur regularly – such as an annual flood. Several publications have presented plans for preparing for disasters, and you should look at these. Several are listed in the bibliography.

There are, however, three things that your institution should definitely do to be prepared for any natural disaster.

First, you should faithfully make daily backup copies of all data and store copies in a secure site that is not likely to be affected by the same disaster you face.

Second, you should have a backup copy of the current version of your operating system and application software stored in the same offsite location. If you have to install your system on a new computer you must have a working backup of the software itself. Merely having the data is not sufficient.

Third, you need to make sure that your name and address files are kept current; every time a client does a transaction with your institution your officers should verify basic demographic information to make sure it is still current, and make any corrections immediately.

BIBLIOGRAPHY

Brown, Warren; Nagarajan, Geetha. *Bangladesh's Experience in Adapting Financial Services to Cope with Floods: Implications for the Microfinance Industry*. Washington, D.C.: Microenterprise Best Practices, 2000. This paper summarizes the lessons learned from a range of MFIs and focuses on three topics: (1) MFI products and product adaptations (including savings, credit, and insurance products), (2) the resulting issues and implications for both clients and MFIs in Bangladesh, and (3) how MFIs in other countries might use the Bangladeshi experience to help inform their own efforts.

Brown, Warren; Nagarajan, Geetha. *Disaster Loan Funds for Microfinance Institutions: A Look at Emerging Experience*. Washington, D.C.: Microenterprise Best Practices, 2000. This paper describes the DLFs developed by Bangladeshi Rural Advancement Committee (BRAC), BURO Tangail, CARE, and Palli Karma-Sahayak Foundation (PKSF) in Bangladesh after the 1998 floods; the Inter-American Development Bank (IADB) in Central America after Hurricane Mitch; and Fundusz Mikro in Poland after the 1997 floods.

Centro Acción Microempresarial. *Desastres Naturales e Instituciones Microfinancieras: Guía para Prevenir y Aminorar el Impacto*. Washington, D.C.: Interamerican Development Bank, July, 2002.

Nagarajan, Geetha. *Microfinance in the Wake of Natural Disasters: Challenges and Opportunities*. Washington, D.C.: Microenterprise Best Practices, 1998. This paper documents the experiences and experiments of MFIs that have found themselves on the front line in natural disaster situations. The author examines the lessons learned from such situations and makes recommendations for donors, policy makers, and MFIs.

Parker, Joan; Nagarajan, Geetha. *Technical Tool Briefs for Natural Disaster Response*. Washington, D.C.: Microenterprise Best Practices, 2001. These briefs focus on the MFI response to rapid onset natural disasters. They discuss the potential interventions and actions that MFIs could undertake in the aftermath of a disaster, based on experiences of MFIs from Hurricane Mitch and the Bangladesh Flood of 1998.

- Brief 1. Loan Rescheduling After a Natural Disaster
- Brief 2. New Loans After a Natural Disaster
- Brief 3. Using Compulsory Savings for Natural Disaster Response
- Brief 4. Non-Financial Emergency Services to MFI Clients
- Brief 5. MFI Liquidity Problems After a Natural Disaster
- Brief 6. Pre-Disaster Planning to Protect Microfinance Institutions
- Brief 7. Pre-Disaster Planning to Protect Microfinance Clients
- Brief 8. Microfinance Donors: Preparing for Natural Disaster

Parker, Joan; Nagarajan, Geetha. *Can Microfinance Meet the Poor's Financial Needs in the Times of Natural Disasters?* Washington, D.C.: Microenterprise Best Practices, 2001. This paper discusses the role of microfinance in the context of communities struck by natural disasters. With foresight, it is argued, regular MFI products can be modified to be useful in post-disaster settings, and MFI systems can be disaster-protected.

ANNEXES

- A. Employee Injury and Status
- B. Physical Damage Assessment
- C. Impact of Personnel Losses
- D. Assessment of Damage to Business Processes
- E. Survey form for clients
- F. Monitoring Forms
 - collections
 - delinquency
 - income and expenses
 - withdrawals
 - loan applications
 - disbursements
- Product Development Process
- Bibliography

ANNEX A
EMPLOYEE STATUS AND INJURY REPORT

Branch: _____				Date: _____		
Summary: _____ Total Number of Employees _____ Number of Employees Deceased _____ Number of Employees Injured _____ Number of Employees with deceased/injured family members Needed to assist employees and their families: Shelter: for _____ families Food and Water: for _____ families; _____ individuals Clothing: for _____ families; _____ individuals Bedding Supplies: for _____ families; _____ individuals Financial Aid: for _____ employees Other:				Comments:		
For Each Employee Who Suffered Damages:						
Name	Position	Personal		Family Death or Injury	Other Damages	Needs
		Death	Injury			

Annex B
Initial Survey of Physical Damage

Infrastructure	Extent of Damage			Needed Action
	Small	Medium	Severe	
Headquarters				
Physical structure (walls, roofs, etc.)				
Public services (water, electricity)				
Vehicles				
Communications (phone, fax)				
Computer Systems				
Other				
Branch No. 1				
Physical structure (walls, roofs, etc.)				
Public services (water, electricity)				
Vehicles				
Communications (phone, fax)				
Computer Systems				
Other				
Branch No. 2 (repeat for other branches)				
Physical structure (walls, roofs, etc.)				
Public services (water, electricity)				
Vehicles				
Communications (phone, fax)				
Computer Systems				
Other				

Annex C
Impact of Injuries or Death of Employees on your MFI

Estimating Impact of Employee Losses
Administrative Personnel

Office: Headquarters (repeat for branches)

Employee	Degree of Injury	Department	Needed Action
Summary of Processes Affected:			

Estimating Impact of Employee Losses
Loan Officers

Office: Headquarters (repeat for branches)

Employee	Degree of Injury	Clients		Needed Action
		Groups	Individuals	
Comments:				

Annex D
Estimating Damage to Business Processes

Office: Headquarters (repeat for branches)

Process	Description of Damage	Needed Action
Collections		
New Loan Processing		
Accounting		
Delinquency Management		
Legal and Enforcement		
Internal Audit		
Front Office Client Service		
Other		
Summary of Processes Affected:		

ANNEX E
CLIENT SURVEY

(pending)

Annex F

KEY INDICATOR TRACKING FOR DISASTERS

Any microfinance institution faced by a sudden, widespread disaster should immediately establish special tracking programs to monitor the extent and nature of damage during the first thirty to sixty days. The three most important things to monitor are collections (recuperaciones), delinquency, and income and expenses.

Collections

The easiest way to track actual versus anticipated collections on a daily basis is with a spreadsheet.

1. Enter the dates of the first 60 days¹ in the first column of the spreadsheet
2. Calculate the daily expected collections for the first 60 days based on the current portfolio
 - a. If your computer can generate an anticipated collection amount for each day based on loan payment schedules, have it generate those numbers
 - b. If the computer program cannot do this, and daily collections are fairly constant, take an average of expected collections for a month, divide by the number of workdays in a month, and use that number for each day's estimate.
3. Enter that information into column 2 of the spreadsheet.
4. Each day, as soon as information on collections is available, enter the amounts *actually collected* for that day into column 3 of the spreadsheet. If you are relying on information from a bank that received collections on your behalf, you will probably encounter a delay in reporting, but it should be kept to a minimum.
5. The spreadsheet should calculate column 4 (the daily difference between amount due and amount received).
6. The spreadsheet should calculate column 5 (the cumulative to-date difference between amount due and amount received (see example below)).

¹The 60 days can either be calendar days (approximately two months), or work days, which would cover more than two calendar months. If calendar days are used there will normally be one or two days each week when no collections are expected, which will produce anomalies in graphs and reports. If work days are used, the data and graphs will be continuous.

Date	Expected Collections	Actual Collected	Daily Difference	Cumulative Difference
1/01/01	100	80	-20	-20
1/02/01	100	75	-25	-45
1/03/01	100	60	-40	-85

7. The spreadsheet should generate a graph showing daily amount expected and amount actually received (columns 2 and 3).
8. The spreadsheet should generate a second graph showing the cumulative difference between amounts expected and amounts actually received (column 5).

Form for Recording Estimated and Actual Collections

[illegible]

Delinquency

In a disaster situation normal delinquency reporting is probably too slow. You need to start tracking its short-term delinquency profile to see if a potential problem is emerging. This would require setting up a special program to report delinquency by days overdue. If your computer program cannot easily do this, a substitute reporting mechanism can be generated in MS Excel, if your computer can print the raw data to a report or a file each day. The data would then have to be entered manually each day.

The spreadsheet needs to contain three columns:

1. Days Overdue (from 0 to 30, and Over 30) is entered in the first column
2. The number of loans falling in each category appears in column 2
3. The amount of loans in each category appears in column 3.

A separate worksheet can be created to hold the data for each day.

Days Delinquent	Number of Loans	Outstanding Balances
0 (current)	100	100,000
1	10	2,000
2	5	1,000
.		
.		
.		
Over 30	10	2,000

The spreadsheet should generate a graph showing that day's short-term delinquency profile. This graph has two Y axes: the first is the number of loans; the second is the outstanding balances of loans in each category. Comparing graphs over time will show if there is a developing problem with delinquency that has not yet shown up in the standard reports.

Form for Recording Daily Delinquency

Days Delinquent	Number of Loans	Outstanding
0 (current)		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
Over 30		
Totals		

Weekly Calculation and Graphing of Income and Expenses

Income is usually a percentage of collections, as collections are made up of principal and interest, and will closely parallel the results of the "collections" tables and graphs. In this section we are more interested in comparing income to expenses rather than just the flow of income. Actual versus anticipated income and expenses probably should be tracked on a weekly rather than daily basis, as daily changes, especially in expenses, will be difficult to analyze meaningfully. A spreadsheet with 5 columns, as can be seen in the example, can be used to record and graph differences.

Date	Planned Income	Planned Expenses	Actual Income	Actual Expenses
1/07/01	2,000	1,500	500	2,000
1/14/01	2,000	1,500	750	2,500
1/21/01	2,000	1,500	1,250	2,250
1/28/01	2,000	1,500	1,750	1,750
etc.				

Data

1. Enter the dates of the last day of the first 8 weeks in the first column of the spreadsheet.
2. Calculate the weekly expected income (interest, fees and miscellaneous) and enter those into column2 of the spreadsheet.
 - a. If your computer can generate an anticipated income amount for each day, have it generate those numbers.
 - b. If the computer program cannot do this, and you have monthly budget projections, take an average of expected income for a month, divide by the number of weeks in a month, and use that number for each week's estimate.
3. Make the same calculation for expected expenses and enter those calculated amounts into column 3.
4. At the end of each week have your computer system generate a report with two numbers – total income and total expenses. Enter those numbers into columns 4 and 5.

Calculations

5. The spreadsheet can calculate four additional columns – Expected Margin, Actual Margin, Cumulative Expected Margin, Cumulative Actual Margin. Expected margin is the difference between planned income and planned expenses, while actual margin is the difference between actual income received and actual expenses incurred. These are calculated each week. Cumulative Expected Margin and Cumulative Actual Margin are merely the running totals of the two margin calculations.
6. The spreadsheet should generate a graph showing the expected and actual income and expenses by

week.

8. The spreadsheet should generate a second graph showing the cumulative expected and actual margin over time.

Form for Recording Income and Expenses

Date	Planned Income	Planned Expenses	Actual Income	Actual Expenses	Expected Margin	Actual Margin	Cumulative Expected Margin	Cumulative Actual Margin